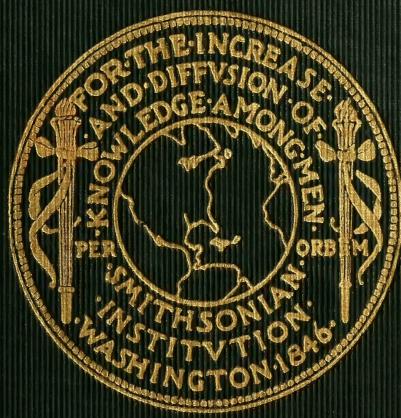
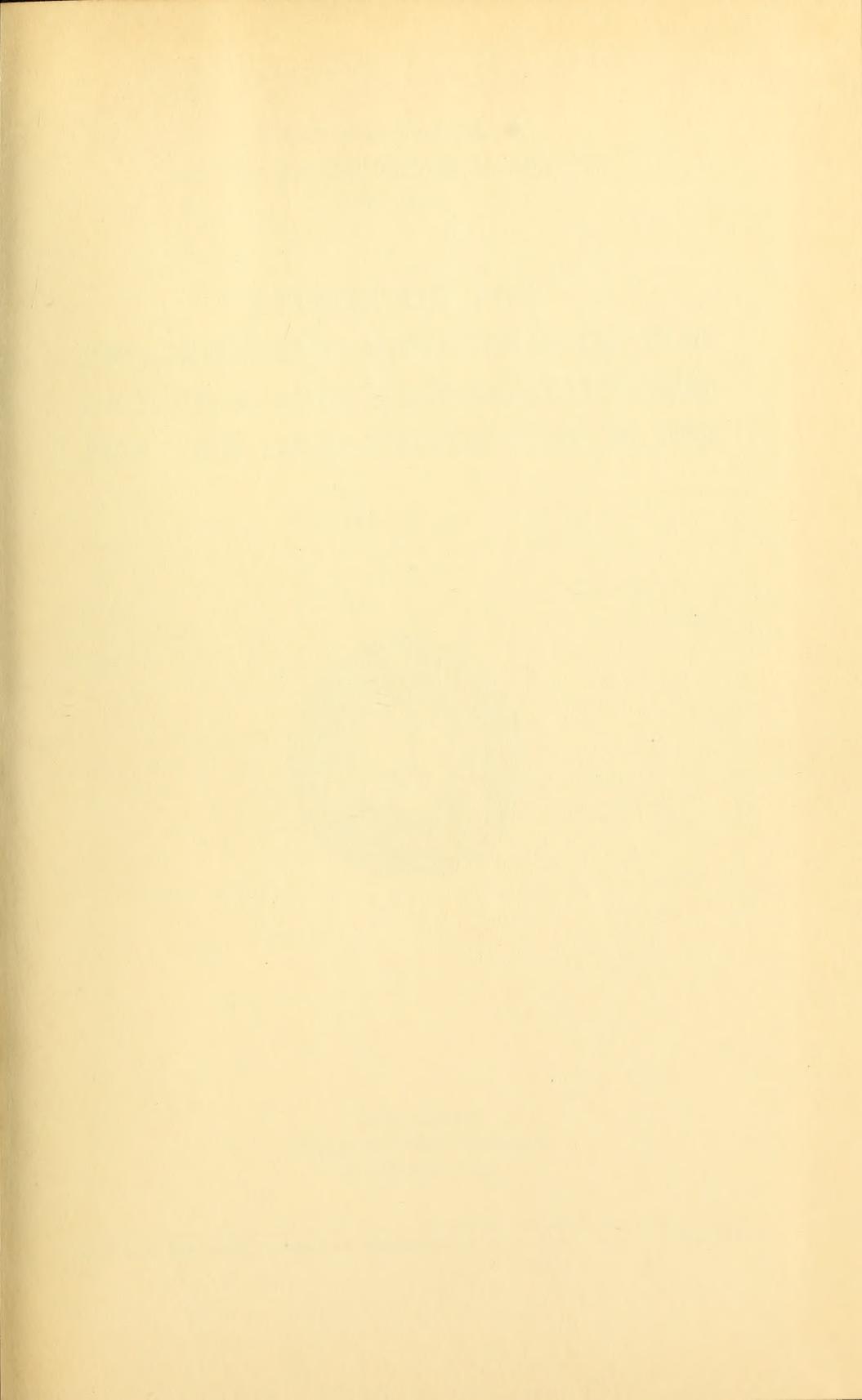


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SMITHSONIAN INSTITUTION  
UNITED STATES NATIONAL MUSEUM

REPORT ON THE  
PROGRESS AND CONDITION OF THE  
UNITED STATES NATIONAL MUSEUM  
FOR THE YEAR ENDED JUNE 30, 1938



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON: 1939

UNITED STATES NATIONAL MUSEUM  
REPORT ON THE  
PROGRESS AND CONDITION OF THE  
UNITED STATES NATIONAL MUSEUM  
FOR THE YEAR ENDED JUNE 30, 1938

UNITED STATES NATIONAL MUSEUM,  
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,  
*Washington, D. C., October 15, 1938.*

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1938.

Very respectfully,

ALEXANDER WETMORE,  
*Assistant Secretary.*

Dr. CHARLES G. ABBOT,  
*Secretary, Smithsonian Institution.*

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# REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1938

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By ALEXANDER WETMORE

*Assistant Secretary of the Smithsonian Institution, in Charge of the  
National Museum*

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## OPERATIONS FOR THE YEAR

### APPROPRIATIONS

FUNDS FOR THE maintenance and operation of the United States National Museum for the fiscal year ended June 30, 1938, were provided by appropriations carried in the Executive and Independent Offices Act approved June 28, 1937. The appropriations and allotments for the work of the Museum are summarized as follows:

Preservation of collections	-----	\$609,380
Administrative reserve	-----	3,000
Available for expenditure	-----	\$606,380
Maintenance and operation	-----	144,840
Administrative reserve	-----	2,500
Available for expenditure	-----	142,340
Printing and binding (allotment to Museum)	-----	30,000
Administrative reserve	-----	3,000
Available for expenditure	-----	27,000
Total available for year		775,720

Funds appropriated for the Museum for 1938 were \$20,250 in excess of those available for 1937, but owing to the deduction of the administrative reserve as shown above, there was actually available for expenditure only \$11,750 above the amount received for 1937.

Under "Preservation of Collections" \$4,800 was received in 1938 to cover the salaries of four additional guards. These new positions have been of material assistance in reducing the overtime service of guards in the buildings of the Smithsonian group, although the force is still below the strength necessary to give full compensatory time earned by overtime duty on Sundays and holidays.

Under "Maintenance and Operation" there was an increase of \$10,450 allotted for expenditure as follows:

- (1) \$3,500 for a new connection with the District water mains;
- (2) \$4,750 for a high-pressure water line in the Natural History Building to supply hose outlets; and
- (3) \$2,200 for new fire hose.

This amount, available only for the fiscal year 1938, will remove serious fire hazards that have come into existence, while the additional water supply will aid in the ordinary requirements in the Natural History Building.

Under "Printing and Binding" a net increase of \$2,000 was available for the printing of Museum manuscripts. This amount was very considerably below the funds required to place our printing on a good footing, but it was of great use in reducing accumulated manuscripts awaiting funds for publication.

While the increases provided for the year are most welcome, attention should be called to additional requirements definitely needed in connection with the Museum's work. Funds are still urgently required for promotions. Turn-overs, even during a period like the present one when outside positions have ceased to be an active competitive feature, have continued excessive. This item results in serious loss to the Museum, requiring, in addition to the time needed for training new personnel, constant attention on the part of the administrative force and personnel office. Apparently this condition cannot be remedied until the Museum is placed on a better basis in comparison with other Government establishments where promotions are given regularly as recognition of unusually efficient service.

Another feature that is causing considerable difficulty is the lack of funds for electrical current and for repairs and alterations to the electrical plant. Every year finds an increasing demand on our current requirements, resulting in higher cost for power and placing a dangerous load on many of the cables in our supply system. During the coming year not less than \$5,000 additional should be available for replacing cables and providing for added current consumption unless we are to allow the electrical system to deteriorate to a dangerous point. Also, an early determination must be made as to placing the buildings of the entire Smithsonian group under alternating current instead of the direct current now available. The unit comprising our buildings is one of the last of the Federal establishments to be entirely dependent on direct current. The total expense of such a change, together with required replacements of worn-out elevators, will approximate \$350,000. This question should be given consideration before much money is spent on renovating the present electrical system.

There is a continuing necessity of obtaining additional personnel in all classes of our service, including professional and subprofessional members of the curatorial staff, the clerical staff, and custodial force. Much of our exhibition equipment is antiquated, and added personnel is required for its proper care and modernization. Increasing age in our buildings and equipment also is bringing with it problems in upkeep that must soon be met if very large expenditures are to be avoided.

Arrangements looking toward additional housing for the National Museum have been outlined in previous Annual Reports. The situation regarding space becomes steadily more serious, and provision must be made soon to meet this need. The first item in the Smithsonian housing program is that of additional wings on the Natural History Building, for which authorization was made by Congress in 1930. It is highly necessary that this matter receive prompt attention, for even when work is actually begun it will be some time before the additional space can be made available. Crowding in many important collections is acute, and many workers are severely cramped for quarters while prosecuting highly useful researches. This important matter is included in the schedules submitted by the Smithsonian Institution in connection with the building program of the Government, and it is hoped that funds may be provided promptly for its prosecution.

#### COLLECTIONS

The additions to the permanent collections of the National Museum during the year cover a great range in variety and kind and bring many welcome materials to our series. Much of this increase has come through expeditions sponsored and largely financed by the Smithsonian Institution and through gifts from our many friends and collaborators. The department of biology receives always the greatest number because of the variety found in this field, but the smaller numbers of objects received in other departments represent equal values to the collections to which they pertain.

New material was received in 1,713 separate accessions, with a total of 312,729 specimens, distributed among the five departments as follows: Anthropology, 2,162; biology, 244,761; geology, 60,927; arts and industries, 2,297; and history, 2,582.

For examination and report 1,716 lots of specimens were received, including a vast variety of objects. A part of these was returned by request to the senders when studies were completed, a part was consumed and destroyed during the process of examination and analysis, and a part came as gifts to form additions to the Museum's permanent collections.

Gifts of duplicates to schools and other institutions numbered 4,969 specimens, among which were objects of many diverse kinds. Exchange of duplicate materials with other institutions and individuals totaled 21,627 specimens, and 18 specimens were transferred to other governmental agencies. Loans for scientific study outside Washington totaled 55,229 specimens, requiring a vast amount of labor in their handling.

Following is a summary of entries now included in the Museum catalogs:

Anthropology	686, 781
Biology	12, 501, 679
Geology	2, 523, 691
Arts and industries	129, 480
History	501, 881
Total	16, 343, 512

#### EXPLORATIONS AND FIELD WORK

The scientific explorations of the year by members of the Museum staff were financed principally by grants from the private funds of the Smithsonian Institution or by contributions from friends of the Institution. The investigations were varied in nature and brought highly important results in additions to scientific knowledge and in contributions of specimens to the national collections.

During April and May 1938, Frank M. Setzler, head curator of the department of anthropology, continued an archeological program in the trans-Pecos area of southwestern Texas. Since 1931 Mr. Setzler has been attempting, as opportunity permitted, to outline the culture status of the aboriginal cave dwellers in the Big Bend region of Texas. His previous excavations at the mouth of the Pecos contributed largely to knowledge of the unusual physical types of this primitive nonpottery-making group. This year, through the L. L. Wilson Fund, he was enabled to excavate a large cave on the M. H. Good ranch, 45 miles north of Dryden, in the northeast corner of Terrell County. Though the cave produced no skeletal material, the 9-foot deposits of burnt rocks and ashes contained sufficient aboriginal artifacts to show a direct cultural relationship with regions to the south and west in the Chisos Mountains and near Alpine. After examining additional material from the Guadalupe Mountains in the Carlsbad Archeological and Historical Society Museum, and a small collection from caves around Albuquerque, N. Mex., Mr. Setzler concludes that this prehistoric phase has a much wider distribution than heretofore recognized, especially in the eastern part of New Mexico. The exact period of occupation of these caves can only be surmised; but since no evidence of European materials has been reported in

association with the sandals, baskets, and other artifacts, he concludes that the caves were abandoned before any of the early Spanish explorers visited the area; since most of their material culture comprises baskets instead of earthenware vessels, they may have become isolated before the manufacture of aboriginal pottery became so widespread and indispensable among the prehistoric inhabitants in either the Southwest or the Mississippi Valley. The chronological relationship, if any exists, between the Big Bend Cave Dwellers and the Basketmaker phase in northern New Mexico and Arizona as yet remains undetermined.

On October 14 Herbert W. Krieger, curator of ethnology, sailed from New York for Charlotte Amalie, St. Thomas, to conduct archeological investigations in the Virgin Islands under a grant from the Smithsonian Institution. The expedition was undertaken as a result of information conveyed by Robert Nichols, superintendent of agriculture of St. Thomas, to the effect that a large shell mound existed on the Island of Anegada, the northernmost of the British Virgin Islands. The immediate objective was an exploration of the Anegada mound, which required the cooperation of the United States Coast Guard Service. W. C. Roy, agricultural officer of the British Virgin Islands, familiar with the native population and the geography of Anegada, joined the expedition at Road Town, Tortola.

A survey of the shell mound led to the conclusion that the culture represented was similar to that of other nonpottery-producing cultures discovered on previous Smithsonian expeditions to the Dominican Republic, Haiti, and Cuba. At the conclusion of the Anegada survey a trial excavation was made of the Indian midden east of Road Town on the Island of Tortola. Later, excavations were carried out in considerable detail on the A. S. Fairchild property at Magens Bay on the Island of St. Thomas, and also at Ackles on United States Government property on the Island of St. Croix.

These investigations led to the discovery of three distinct cultures, all of which may be of Arawak origin—the shell culture on the Anegada site, the early Arawak culture type of the Road Town site and to a certain extent of the Magens Bay area, and the late Arawak culture of the Ackles site. An overlapping of the Arawak I and Arawak II phases was strikingly illustrated in the excavations at Magens Bay. A chronology of West Indian aboriginal cultures has consequently assumed form. The sequence of the three main culture types just indicated permits of the dovetailing as subcultures for Arawak I (early Arawak) and for Arawak II (late Arawak) of the material from certain sites in the Dominican Republic and Haiti excavated by former Smithsonian expeditions from 1928 to 1931. It is quite clear that the shell middens of the caves of the south shore of Samaná Bay (Smithsonian expedition, 1928) and of the Ile à Vache

shell midden (Smithsonian expedition, 1931) are culturally related to the Anegada shell midden. The expedition to the Virgin Islands thus has crystallized tentative conclusions with regard to the classification of West Indian culture sequences based on numerous investigated sites.

Dr. Aleš Hrdlička, curator of physical anthropology, after a brief stop at points in southeastern Alaska, spent the greater part of June, July, and August 1937 in archeological investigations on the Aleutian Islands. In this work he was assisted by the following students: Sydney Conner, Paul Gebhardt, Paul Guggenheim, Alan G. May, Stanley Seashore, and Walter R. Wineman. After reaching the Aleutian Islands the party received permission to work in the Commander Islands in Soviet territory, but because of unforeseen circumstances the visit had to be very short. Although there was little time for scientific work, enough information was gained to encourage the arrangement for another visit. The Institution in its northern work is once more deeply indebted to the United States Coast Guard for its excellent cooperation, which made possible the work not only in the Aleutian Islands but in the Commander group. In 1938, again through the cooperation of the United States Coast Guard, work was continued in the Aleutian Chain and was well under way at the close of the fiscal year. Further account of it will be made in the report for next year.

From the beginning of the fiscal year until September 13, 1937, Dr. Waldo R. Wedel, assistant curator of archeology, was occupied in an archeological survey in Kansas, beginning a long-term program that is planned to cover a complete survey of the entire State in an attempt to establish the outlines of the aboriginal Indian cultures throughout that region. It should also reveal answers to some of the puzzling problems relating to prehistoric cultures in the Mississippi Valley and in the Western Plains. By using early documentary accounts, some of the historic Indian sites can be definitely identified, and thereby they may reveal a complex of material culture traits that can be identified with their prehistoric antecedents. Dr. Wedel's investigations of 1937 included excavations at three village sites along the bluffs of the Missouri River and above Kansas City and two in the Kansas River Valley near Manhattan. In the prolific site on Line Creek, northwest of Kansas City, evidences were found of an extended occupation of prehistoric origin containing two diagnostic types of earthenware vessels. One type has a general cord-roughened decoration, while directly associated with it was a superior ware bearing decorations closely comparable to the Hopewellian type of the Mississippi Valley and never before reported as far west as Kansas City. An early Kansa Indian village was also investigated near the old river town of Doniphan, Kans. This vil-

lage was visited by early explorers in 1724 and again by Lewis and Clark in 1804. A few miles below the mouth of the Blue River a circular house site was excavated in an old Kansa village visited and described by Major Long's expedition in 1819. Dr. Wedel again resumed his explorations in Kansas on May 11, 1938, and was in the field at the close of the fiscal year.

Since Judge W. J. Graham's death on November 10, 1937, arrangements have been made for Dr. T. Dale Stewart, assistant curator of physical anthropology, to take over the excavations of an Indian site at Potomac Creek, Va., and to advance the work from the point reached by Judge Graham. During the latter part of the fiscal year Dr. Stewart made several visits to the site for preliminary surveys.

Through the friendly cooperation of William N. Beach and J. Watson Webb, the National Museum has obtained a valuable collection of large mammals from the Rainy Pass region beyond Mount McKinley in Alaska. In preparation for this work pack horses under charge of Harry Boyden were sent to Alaska in June. Mr. Beach and Mr. Webb, accompanied by W. L. Brown, chief taxidermist of the National Museum, arrived at McKinley Park Station on the Alaska Railroad on the evening of August 13 and continued through the park to join the pack outfit on the McKinley River. Work in this field continued until the middle of September and resulted in obtaining fine material, including accessories, for a habitat group of moose, which will be mounted for exhibition. The largest bull moose secured has a fine heavy set of horns with a spread of 65 inches. In addition, the party secured caribou and other mammals and small birds much needed for the National Museum. The members of the party were flown out by plane with their collections from Ton zona Lake on September 14 and 15, which enabled them to get out of this difficult country before snow.

In continuation of work begun last year in West Virginia, Watson M. Perrygo, scientific aide, made collections of birds and mammals in Tennessee to obtain needed material for the National Museum. Necessary permits were granted through the cordial cooperation of Howell Buntin, director of game and fish, Tennessee Department of Conservation, and other officials concerned with game, administration of national forests, and State game preserves gave friendly assistance in every way. Mr. Perrygo left for the field early in April accompanied by Carleton Lingeback as assistant and began work in the Mississippi bottoms near Memphis. Work continued around Reelfoot Lake, on the Cumberland Plateau, and in the high mountains along the western border of the State, terminating on July 15 for the summer. In mid-September the party left for the field again, Mr. Lingeback being replaced by Henry R. Schaefer. The first collections were made on Roan Mountain, one of the highest moun-

tains in the Eastern United States, having a summer-season temperature reputed to be the coldest of any in the entire Southeast. Following this collections were made in the Clinch Mountains, and then the party again visited the area about Reelfoot Lake to follow the fall bird migration in that region. After further investigations in the central and southern part of the State they returned to Washington the middle of November. The excellent collections of birds and mammals secured will form the basis of reports similar to those prepared for the work in West Virginia of last year. The work was carried on under the W. L. Abbott Fund.

During October and November Dr. Alexander Wetmore, assistant secretary, traveled in northwestern Venezuela to study the birds through arrangements perfected under the friendly cooperation of the American Minister, the Hon. Meredith Nicholson, and the gracious assistance of Dr. E. Gil Borges, Ministro de Relaciones Exteriores of Venezuela. In this work a survey was made of the bird life along a line extending from Ocumare de la Costa on the sea coast through the mountain range of the Cordillera de la Costa to Maracay, and from there to the northern Llanos, in the vicinity of El Sombbrero. In addition to securing an important collection of birds, Dr. Wetmore made many observations on birds in life. He returned to Washington early in December.

Capt. Robert A. Bartlett again visited the western coast of Greenland during the summer of 1937 on his schooner, the *Morrissey*, and secured important gatherings of marine animals that were presented to the National Museum. Collections were made from Cape York north by way of Northumberland and Hakluyt Islands to Smith Sound, the expedition returning to New York on September 18.

Dr. D. C. Graham continued work in western China, forwarding collections including many insects, as well as birds and other vertebrates.

Dr. Charles E. Resser, curator of stratigraphic paleontology, studied Cambrian rocks on the flanks of the Adirondack Mountains, in New York and Vermont, and along the St. Lawrence River in Quebec, making investigations in Pennsylvania en route. In addition to collecting invertebrate fossils he checked the relations of the various strata examined in connection with his work in the laboratory.

Dr. G. Arthur Cooper, assistant curator of stratigraphic paleontology, accompanied by P. E. Cloud, returned early in the year from a month's investigations of the Devonian of Michigan. In the latter half of September Dr. Cooper and Dr. Josiah Bridge visited the Champlain Valley to study the Chazy rocks, both trips yielding excellent fossils. Dr. Cooper made a third trip in August, in company with Dr. Bradford Willard, of the Pennsylvania Topographic

and Geologic Survey, to study the Tully formation along the Allegheny Front and from Lockhaven to the Schuylkill Valley.

E. P. Henderson, assistant curator of physical and chemical geology, was abroad from early in May until October 1937. Two months were occupied in attendance at the Seventeenth International Geological Congress at Moscow, in visiting important museums, and in collecting minerals in the Kola Peninsula and the Ural Mountains. During the remaining time he traveled in Ceylon, studying the gem deposits of that island, and in Japan visiting mineralogical institutions and dealers from whom interesting specimens were obtained. Important mineralogical and geological collections were made, but the more important results are the contacts and exchanges either made or pending by which a large quantity of Russian, Norwegian, Swedish, Scottish, and Japanese material will be received. While in England Mr. Henderson secured by purchase several Rumanian minerals from one dealer and Austrian minerals from another. Exchanges of meteorites were arranged with the British Museum, and an exchange with the Grant Institute of Scotland was initiated. In Norway Mr. Henderson made contacts that resulted in the purchase of the largest and best specimen of the rare mineral thortveitite ever to leave Norway, as well as the gift of a very large specimen. Three exchanges were made with various Russian museums, and relations were established under which the National Museum will receive their new materials. Dealers were interviewed in Japan, many outstanding mineral specimens obtained, and arrangements made for acquiring some of the finest minerals to leave Japan. Exchanges were arranged with the Imperial University, Tokyo, and some newly described minerals obtained.

As the field expedition of 1937 under C. W. Gilmore, curator of vertebrate paleontology, extended well into the present fiscal year, only brief mention was made of it in last year's report. This expedition in the Upper Cretaceous of the North Horn area in central Utah and in the Triassic of the Petrified Forest region of Arizona met with most gratifying results. The Utah area was a virgin field so far as professional collecting was concerned, and the results attained fully justified the venture. A good beginning was made in the development of a fauna for the North Horn formation of the Upper Cretaceous, and a small collection of mammalian remains indicated for the first time the presence of Paleocene strata in this geological section. The finding of a large sauropod dinosaur skeleton in association with Upper Cretaceous dinosaur remains is a discovery of much interest and fully establishes the fact that this group of reptiles in North America lived into the Upper Cretaceous. Most of the specimens obtained are new to science. From the Triassic of Arizona important phytosaurian and amphibian remains were collected that go far in

filling gaps in our permanent collections. The collections obtained filled 13 large cases having a combined weight of 5,729 pounds. George F. Sternberg, as in previous seasons, rendered efficient assistance, and George B. Pearce ably assisted as field assistant.

In May Dr. C. L. Gazin, assistant curator of vertebrate paleontology, left Washington to head an expedition that will continue the explorations in central Utah so auspiciously begun last season. This will be followed by work in the Upper Eocene deposits of the Uinta Basin.

In May Dr. Alexander Wetmore, Assistant Secretary, as representative of the Smithsonian Institution and chairman of the official delegation of the United States, attended the Ninth International Ornithological Congress, held in Rouen, France. At the close of the meetings it was voted to hold the next Congress, which will come in 1942, in the United States. Dr. Wetmore was then elected President. Following the meetings he visited museums and laboratories in Switzerland, particularly in Bern and Basel, and later worked at the British Museum (Natural History) in London.

#### ASSISTANCE FROM WORK RELIEF AGENCIES

At the beginning of the year, persons assigned from the Works Progress Administration of the District of Columbia to work at the Museum numbered 88. Owing to transfers and new assignments, this number fluctuated somewhat, but increased slowly until at the close of the year 167 were so engaged. Man-hours for the period July 1, 1937, to June 30, 1938, totaled 130,205. For the Federal art project the man-hours totaled 1,125, making the grand total of man-hours for both projects 131,330.

As in the preceding year this assistance related to preserving and cataloging collections in the Museum and to general work in the library. Specific tasks included the following:

- Checking, labeling, and repairing library material.
- Preparing drawings and photographs.
- Typing notes and records.
- Miscellaneous work on specimens, including arranging, cataloging, checking, labeling, and numbering.
- Model making and repair.
- Preparing and mounting specimens.
- Labeling and drafting.
- Translating.
- Work on plaster casts.

During the year considerable progress was made in clearing up arrearages in work that had been accumulating over a long period owing to the inadequacy of our regular staff. The project proceeded smoothly, not only as a result of the efficient organization now developed but also because many of the workers had gained experience

from the previous year. The District of Columbia Works Progress Administration Office continued its excellent cooperation in the selection and assignment of new workers.

At the close of the year 167 workers were on duty from the Works Progress Administration and 1 from the Federal art project.

#### EDUCATIONAL WORK

The National Museum during the year continued its customary activities in educational lines. Our exhibition halls display great series of objects so arranged as to demonstrate facts of many kinds, on subjects ranging from the tools and dress of primitive man to complicated modern machinery, examples of the life of strange lands, of the elements that compose the earth, fossil animals and plants of former ages, and many other things. Descriptive labels accompany all these, and there is constant change to keep them properly arranged and up to date. The whole serves as a compendium of reference to the student or as an attractive display to the one of more casual interest, from which all may profit according to their desires.

In addition, the Museum is constantly active in the dissemination of knowledge in response to many hundreds of inquiries that come by mail or from visitors. Classes from the city schools are guided through the halls, and groups of students from a distance are given similar service. Although the Museum does not maintain regular series of lectures, members of the staff are called on frequently to address meetings. Students throughout the country interested in definite problems come to work with our collections and libraries, and frequently workers from abroad are engaged in investigations here that sometimes continue for months. From this it may be seen how widely varied is the range of our educational activities and how extensive the field that they cover.

#### VISITORS

Since the year 1932-33, when a low point was reached, presumably as a result of unfavorable economic conditions, the number of visitors to the various Museum buildings has steadily mounted. This year there were 119,638 more visitors than last, bringing the total up to 2,408,170, which is our greatest annual attendance to date. The 426,429 visitors during July 1937 is the largest number ever recorded for a single month.

The average attendance for weekdays was 6,633 and for Sundays 6,643. The number of visitors to the Smithsonian Building on weekdays totaled 311,239 and on Sundays 60,531; to the Arts and Industries Building 931,011 on weekdays and 163,243 on Sundays; to the Natural History Building 628,658 on weekdays and 121,649 on Sundays; and to the Aircraft Building 191,839 on weekdays (closed on

Sundays). Table 1 shows the number of visitors during each month of the year.

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1938*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building	
1937					
July	67,824	187,120	128,112	43,373	426,429
August	62,093	180,818	97,323	27,361	367,595
September	40,157	114,001	67,021	21,140	242,319
October	22,817	65,940	52,964	9,468	151,189
November	15,350	41,563	34,779	7,373	99,065
December	10,941	29,065	26,264	6,232	72,442
1938					
January	11,474	31,939	34,767	5,019	83,199
February	13,233	38,382	31,603	6,661	89,879
March	19,104	56,168	42,715	8,336	126,323
April	42,848	141,362	94,548	20,355	299,113
May	31,608	103,004	70,417	17,273	222,302
June	34,321	104,953	69,794	19,248	228,315
Total	371,770	1,094,254	1,750,307	191,839	2,408,170

<sup>1</sup> Not including 4,025 persons attending meetings after 4:30 p. m.

## LIBRARY

The library of the National Museum, with its 95,171 volumes and 115,539 pamphlets, chiefly on natural science and technology, is of great importance in the Smithsonian library system. It consists of 2 major and 35 minor units, each closely related to the interests of the Museum. The collection was increased during the year by 2,639 volumes, 9,160 parts of volumes, and 929 pamphlets—a total of 12,728 publications.

A generous number of these were presented by the scientific staff, the Smithsonian Institution, and the Library of Congress, as well as by friends of the Museum outside the Government. Among the last were Mrs. Walter Hough and Mrs. Frederick V. Coville, who added to their previous gifts many items from the libraries of the late Dr. Hough and Dr. Coville. But most of the accessions came by exchange. In fact, there were more large exchange sendings than usual of material needed in the important sets.

In connection with the exchange work of the library, the Smithsonian duplicates were thoroughly searched, and hundreds of special letters were written, with the gratifying result that 2,821 volumes and parts were obtained—an increase of 363 over the year before.

The number of new exchanges arranged was 140. Thus again notable progress was made toward completing the standard files that

are indispensable in the work of the curators. This was particularly fortunate inasmuch as the sum available for the purchase of books and periodicals called for by the scientists is far too small to meet their needs. Books secured by loan for the curatorial staff in their official work totaled 2,239, of which the greater number came from the Library of Congress, the Department of Agriculture, the Geological Survey, and the Army Medical Museum and Library.

In the course of the year the staff entered 9,300 periodicals, cataloged 2,912 publications, and added 14,896 cards to the catalogs and shelf lists. They sent to the sectional libraries for filing 4,080 publications and loaned to the curators 10,459. They returned to the Library of Congress 1,944 volumes and to other libraries 394. They prepared for the bindery 494 volumes. They filed 492 Wistar Institute cards and spent some time clarifying doubtful points in the author cards of the *Concilium Bibliographicum*. They finished cataloging the sectional library of botany and began that of administration. They continued the very important task of reading the shelves and revising the records of the serial sets of foreign institutions and societies, so that by the close of the year they had completed those of Germany, France, Italy, Spain, Portugal, Sweden, Denmark, and Finland. They also continued the scanning of nontechnical journals for scientific articles that might otherwise have escaped the notice of the curators concerned, and the inventorying of the technological library, making changes when necessary in the catalog and shelf list. They also assisted in supervising the work of several W. P. A. employees. Finally, they rendered noteworthy reference and bibliographical service to the scientific staff, to inquirers in other branches of the Government, and to correspondents outside of Washington.

The 35 sectional libraries remained unchanged, as follows:

Administration	Invertebrate paleontology
Administrative assistant's office	Mammals
Agricultural history	Marine invertebrates
Anthropology	Medicine
Archeology	Minerals
Biology	Mollusks
Birds	Organic chemistry
Botany	Paleobotany
Echinoderms	Photography
Editor's office	Physical anthropology
Engineering	Property clerk's office
Ethnology	Reptiles and amphibians
Fishes	Superintendent's office
Foods	Taxidermy
Geology	Textiles
Graphic arts	Vertebrate paleontology
History	Wood technology
Insects	

Early in the fiscal year another installment of steel stacks was set up in the east gallery of the third floor of the Arts and Industries Building. It is hoped that the fourth and final installment can be purchased soon, to take the place of the present wooden shelving in the room adjoining the east gallery. But even more acute than this is the need for increased shelf room for the main natural-history collection. Another need, which has grown urgent the past year, is that of an adequate fund for binding. Owing to the recent advance in the cost of binding, the sum allotted for this purpose should be correspondingly larger than at present if the library is to protect and preserve its material, much of which, if it were lost, could be replaced, if at all, only at considerable expense.

Two changes occurred in the permanent staff. Mrs. George C. Rodgers, senior stenographer, resigned and the position was filled by the transfer of Miss Nancy Alice Link from the Bureau of Internal Revenue. Joseph A. Salat, Jr., assistant messenger, accepted appointment elsewhere and was succeeded by Clyde E. Bauman, who was transferred from the United States Naval Academy.

#### PUBLICATIONS AND PRINTING

There was allotted \$30,000 for the fiscal year 1937-38 for the publications needs of the National Museum. Of this, \$3,000 was used for binding, \$3,000 for the Museum printer's salary, and \$3,000 as a 10 percent compulsory budget deduction, leaving \$21,000 for the printing of the Annual Report, Bulletins, and Proceedings. Twenty-six publications were issued—the Annual Report, 1 volume of Proceedings completed, 5 Bulletins, and 19 separate Proceedings papers. These made a total of 1,640 octavo pages and 242 plates, an increase of 36 pages and 107 plates over last year. They are listed at the end of this report.

On February 18 and 19, 1938, the Museum editor, Paul H. Oehser, represented the Smithsonian Institution at a joint meeting of the American Philosophical Society with representatives of organizations concerned with the publication of research held in Philadelphia.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 45,552 copies, while in addition 12,209 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

During the year 687,286 forms, labels, and other items were printed, and 494 books were bound.

*Indexing.*—Little time was available during the year, because of a full publication program, for work on the index of Museum publications, begun 5 years ago. The index is now complete through Bulletin 47 and Proceedings volume 17.

The editor prepared the index for volume 84 of the Proceedings and for Bulletin 170, "Life Histories of North American Birds of Prey: Part 2, Falconiformes and Strigiformes." The editorial clerk, Miss Gladys O. Visel, partially completed the index for Bulletin 100, volume 6.

#### PHOTOGRAPHIC LABORATORY

The photographic laboratory, under the direction of Dr. A. J. Olmsted, made 20,119 prints, 4,290 negatives, 709 lantern slides, 475 enlargements, and 9 transparencies; developed 95 rolls, 23 film packs, and 43 cut films; and mounted 7 maps. This work included, in addition to that done for the Smithsonian proper and the National Museum, photographic needs of the Bureau of American Ethnology and the National Collection of Fine Arts, supplied through a co-operative arrangement.

The laboratory is now equipped with a photorecording machine for copying letters and pages of books onto 35 mm film. As color photography continues to develop, additional facilities in this field are being provided. Color transparencies and negatives are now being produced with very satisfactory results.

#### BUILDINGS AND EQUIPMENT

*Repairs and alterations.*—Most of the work of building repair and maintenance was of a routine nature. Considerable repainting was accomplished in all the buildings, particularly the Smithsonian Building following last year's rewiring project. It was necessary to devise a way to repel pigeons and starlings from roosting on the tops of the stone columns of the south portico of the Natural History Building. Galvanized sheet iron with galvanized coated nails was attached to the tops at considerable trouble. Air-conditioning equipment was installed in the Secretary's office in the Smithsonian Building. The offices and laboratory of the division of graphic arts were thoroughly remodeled. The taxidermist shop in the south shed was repaired, fireproofed, and otherwise renovated.

*Heat, light, and power.*—During the year 59,342,000 pounds of steam were used for heating the group of museum buildings. This was furnished by the Government's Central Heating Plant and represents a slight increase over last year. More electric current, too, was used this year than last, the total kilowatt-hours being 1,382,000. The problem of obtaining additional electric supply becomes more serious each year, and it will soon be imperative either to increase the number of cables entering the Natural History Building or procure alternating current service. The Smithsonian buildings are practically the only Government group in Washington not using alternat-

ing current, which may be purchased at more economical rates than direct current.

*Ice production.*—The refrigerating machine for manufacturing ice for the Museum buildings was operated 3,675 hours during the year, producing 396 tons of ice at the rate of \$1.45½ a ton.

*Fire protection.*—The most important improvement in fire protection was the provision of an adequate water supply for the Natural History Building, as the result of a special appropriation of \$10,450 for the purpose. A new 8-inch water main was run from Constitution Avenue and a new distribution pipe line was installed for the fire-hose connections. In addition, all the fire hose, which had been in use since the building was first occupied in 1910, was replaced with new.

Elimination of fire hazards called for the remodeling of the taxidermist shop in the south shed; removal of a large quantity of inflammable material; and the fire-proofing and remodeling of the Smithsonian post office.

All the fire-protection apparatus was periodically tested and inspected during the year.

*Furniture and fixtures.*—The furniture added during the year included 10 exhibition cases; 357 pieces of storage, office, and laboratory furniture; and 235 drawers. Equipment condemned and disposed of consisted of 48 exhibition cases and bases; 104 pieces of storage, office, and laboratory furniture; and 77 boxes, drawers, and frames. An inventory of furniture on hand June 30, 1938, showed 3,688 exhibition cases; 18,899 pieces of storage, office, and laboratory furniture; and 110,661 drawers, boxes, and frames of various kinds.

#### MEETINGS AND SPECIAL EXHIBITS

Scientific, educational, and welfare organizations are allowed the use of the auditorium and lecture room of the Natural History Building for regular and special meetings, and whenever possible the Museum assists in carrying out their programs. During the year 112 such meetings were held, including conferences and conventions by the following organizations: Eastern States Archeological Federation, Geological Society of America, United States Children's Bureau, and United States Tariff Commission. Noteworthy also were lectures by Raymond De Frees on "Eclipses of the Sun and Moon"; William Marks Simpson on "Making of Coins and Medals"; Dr. Aleš Hrdlička on "Archeological Field Work in Alaska"; C. W. Gilmore on "Collecting and Preparing Dinosaurs"; Dr. Harlan True Stetson on "The Sun and the Atmosphere"; and Dr. Marcus Barbeau on "How Totem Poles Originated." In addition, a special meeting of the American Pharma-

ceutical Association was held on the evening of March 21 in the section of medicine, Arts and Industries Building.

*Special exhibits.*—The foyer and adjacent space of the Natural History Building were occupied almost continuously during the year with a series of 17 special exhibits conducted under the auspices of various educational, scientific, and governmental agencies, as follows:

June 7 to July 26, 1937: Exhibition of elementary aircraft, consisting of ancient and modern kites and boomerangs from the National Museum collections.

July 12 to 16, 1937: Contest and exhibition of small models of automobiles conducted by the Fisher Body Craftsman's Guild.

August 2 to 8, 1937: Exhibition of art work of Mexican school children, sponsored by the Mexican Embassy.

August 20 to October 2, 1937: Exhibit of Cuban arboreal land shells, under direction of Dr. Carlos de la Torre and Dr. Paul Bartsch.

September 1 to 30, 1937: Exhibition of American Indian portraits covering the period 1585 to 1926, by various artists, all taken from the collections in the National Museum.

October 1 to 7, 1937: Exhibit commemorating the Centennial of Coeducation in America, under auspices of Oberlin College.

October 9 and 10, 1937: The fifth annual rose show sponsored by the Potomac Rose Society.

October 15 to 31, 1937: Combined exhibit by the Twenty Women Painters and the Landscape Club.

October 18 to November 5, 1937: Exhibition of colored drawings by Gilberto Antolinez depicting Venezuelan Indian mythology.

November 1 to 30, 1937: Exhibit of archeological specimens collected by Dr. Aleš Hrdlička during his field work in Alaska, 1926 to 1937.

December 1, 1937, to January 3, 1938: Exhibition of Peruvian, Ecuadorean, and Venezuelan pre-Columbian art from the collections of Dr. Rafael Requena and Dr. Ernesto Franco.

January 1 to 31, 1938: Display of articles made by persons on relief on nonconstruction projects of the Works Progress Administration.

February 4 to 27, 1938: Exhibition of water colors by William Spencer Bagatopoulos, under auspices of National Collection of Fine Arts.

March 3 to 31, 1938: Philatelic exhibition, under auspices of the Washington Collectors' Club.

April 6 to 29, 1938: Exhibition of paintings, etchings, and sculpture from the National Collection of Fine Arts.

May 3 to 30, 1938: Seventh annual architectural exhibit of the Association of Federal Architects.

June 3 to 30, 1938: Exhibition of naval historical prints from the Eberstadt collection, lent by the Naval Historical Foundation.

#### CHANGES IN ORGANIZATION AND STAFF

During the year there were few changes in the scientific staff. In the department of anthropology, Frank M. Setzler was appointed head curator on July 1, 1937, and Henry B. Collins, Jr., was advanced to associate curator, division of ethnology, on February 17, 1938. In the department of biology Dr. Leonard P. Schultz was

made curator of the division of fishes on January 16, 1938, and H. Harold Shamel was advanced to senior scientific aide in the division of mammals on September 3, 1937. In the department of geology Bertel O. Reberholt, by reallocation, was advanced to senior scientific aide in the division of physical and chemical geology, November 1, 1937. William E. Moran was appointed junior scientific aide in the division of vertebrate paleontology on June 16, 1938. In the department of arts and industries Kenneth M. Perry was appointed assistant exhibits worker in the division of mechanical technology on October 16, 1937.

On January 1, 1938, Norman H. Boss, chief preparator, division of invertebrate paleontology, returned to duty from detail to the Greater Texas and Pan American Exposition at Dallas, where he was assigned as exhibit supervisor for the Smithsonian Institution.

Other additions and changes include the following: Stephen C. Stuntz was advanced to clerk-stenographer, division of mammals, on October 1, 1937; John F. Loome to assistant property clerk on October 16, 1937; Mrs. Dorothy Chamberlain reinstated as clerk-stenographer, head curator's office, department of arts and industries, on August 21, 1937; Miss Harriet Story advanced to assistant clerk-stenographer, office of superintendent of buildings and labor, on July 7, 1937; Miss Nancy Alice Link appointed assistant clerk-stenographer in the library on January 19, 1938; Lewis E. Perry reallocated to assistant clerk (shipper) on August 1, 1937; and Robert E. Kirk advanced to junior clerk (assistant shipper), on September 16, 1937.

On the guard force, William H. Smith was advanced to lieutenant of guard and William H. Chism to principal guard (sergeant) on February 16, 1938. Under the office of the superintendent of buildings and labor, Rafe A. Watkins was advanced to the position of assistant mechanical superintendent (foreman of cabinet shop), and Walcutt C. Hamer to principal mechanic (assistant foreman) in charge of building repair work, on September 1, 1937.

Through the operation of the retirement act, the following employees left the service through age: Miss Aida M. Doyle, of the section of organic chemistry, on March 31, 1938, with over 48 years of Government service; August N. Buehne, guard, on July 31, 1938, with 30 years of service; William H. Short, laborer, on January 31, 1938, 25 years; and Sarah Johnson, charwoman, on April 30, 1938, 17 years. By optional retirement: Benjamin L. Chambers, guard, on July 31, 1937. Through disability: Arthur L. O'Leary, under scientific helper, on November 12, 1937; Henry A. Forsyth, guard, on May 31, 1938; Daniel T. Smith, guard, on October 13, 1937; Thomas Carter, laborer, on September 30, 1937; Lucius Harrod, Jr.,

laborer, on August 31, 1937; Ralph Willis, messenger, on July 31, 1937; Katie E. Bumbry, charwoman, on May 12, 1938; and Alice Turner, charwoman, April 26, 1938.

The Museum lost four employees through death during the year: Arthur J. Poole, scientific aide in the division of mammals, on July 3, 1937, after 22 years 7 months of service; Daniel Clark, skilled laborer, on August 23, 1937, after 28 years of service; Jacob Willy, lieutenant of guard, on January 25, 1938, with 16 years of service; and William Robinson, laborer, on May 14, 1938, with 20 years of service. From the honorary staff the Museum lost through death Dr. Maurice C. Hall, honorary custodian of helminthological collections, on May 2, 1938.

## DETAILED REPORTS ON THE COLLECTIONS

### DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

CONSIDERABLE progress was made in the department of anthropology during the fiscal year along the lines of better care of collections, in building temporary and permanent exhibits, and especially in explorations and research. Perishable specimens, both in the vast study series and on public display, received constant attention in order to prevent deterioration.

Three temporary exhibits were arranged in the foyer of the Natural History Building for a period of a month each during the autumn and winter by the divisions in the department. Period arts and textile collections were reinstalled to make a much improved and more colorful display of articles forming part of a permanent exhibit hall in the northwest wing on the second floor.

The department, through various private funds of the Smithsonian Institution, was enabled to inaugurate and also to continue archeological explorations in Alaska, the Virgin Islands, Kansas, and Missouri, Texas, and along the Potomac River in Maryland and Virginia. During April and May, 1938, Frank M. Setzler excavated a large cave on the M. H. Goode ranch in northeastern Terrell County, Tex., to further an archeological program begun in 1931. During July and August 1937 Dr. Aleš Hrdlička visited 10 of the Aleutian Islands and was fortunate in being able to spend a few days on the Commander Islands, U. S. S. R. From the middle of October 1937 to January 1938 Herbert W. Krieger resumed the Institution's archeological studies in the West Indies, where investigations were limited this year to the Virgin Island group including the islands of Anegada, St. Thomas, and St. Croix. From July to September 1937 Dr. Waldo R. Wedel inaugurated an archeological survey of Kansas, excavating three village sites along the bluffs of the Missouri River above Kansas City and two in the Kansas valley near Manhattan. The results obtained exceeded all expectations, and Dr. Wedel returned to this vicinity the middle of May 1938 for additional data from this significant and interesting area. Dr. T. Dale Stewart continued his anthropological investigations on the skeletal material obtained largely by Mrs. A. L. L. Ferguson from an important village at Accokeek, Md.; also on material obtained by the late Judge W. J. Graham from a site at Potomac Creek, Stafford County, Va.

Explorations at the latter site will be continued by Dr. Stewart. Whenever routine Museum duties permitted, research on these and previous explorations was furthered by the scientific staff. Considerable time was devoted to cooperating with other Government agencies. Without the assistance rendered by workers provided through the Works Progress Administration, especially in the divisions now understaffed, these results could never be obtained.

#### ACCESSIONS

During the year the department received 125 accessions covering a total of 2,162 specimens. This is an increase of 372 over the number received in 1937. This total includes all specimens received as gifts, deposits, and transfers from outside departments and friends of the Institution, but does not include many more actually received but still under study by staff members. These will not be officially tabulated until the material has been turned over to the respective divisions. The 125 accessions were assigned to the following divisions and sections within the department: Archeology, 33 accessions (900 specimens); ethnology, 51 accessions (562 specimens); physical anthropology, 14 accessions (555 specimens); ceramics, 11 accessions (78 specimens); musical instruments, 6 accessions (10 specimens); and period art and textiles, 10 accessions (57 specimens).

*Archeology.*—The division of archeology received 33 accessions, totaling 900 specimens, an increase of 593 over the same period in 1937. Five (186 specimens) were obtained from the Old World. Some of the more important materials are: 93 complete vessels and fragments from Honduras, the Institution's share of material obtained by the 1936 joint expedition with the Peabody Museum of Harvard University; 78 Stone, Bronze, and Iron Age objects from Denmark, an exchange with the Danish National Museum; 77 earthenware, alabaster, and bronze artifacts from Egypt, Cyprus, and Italy, presented by Miss Annie-May Hegeman; 29 Neolithic stone implements from the Union of South Africa, donated by Wilfrid C. Abbott, of Capetown; replica of a sculptured head from Temple 22 at Copan, Honduras, a gift from the Carnegie Institution of Washington; 9 pottery vessels and fragments from Gasparilla Sound, Charlotte County, Fla., presented by Montague Tallant; 90 stone projectile points, copper beads and pins, shell beads, and vessels from the Temple Mound in Le Flore County, Okla., donated by J. G. Braecklein.

*Ethnology.*—In the division of ethnology 51 accessions, totaling 562 specimens, were received. The following specimens were noteworthy: Two carved elephant tusks mounted on a decorated teakwood base, given by Dr. Ambrose Swasey. The carvings illustrate the Buddhist

legend concerning King Weythandaya and his wife, Queen Madi, which was selected and executed by the Burmese artist, Maung Kin. As in previous years, C. C. Roberts donated numerous objects of native art and craft from West Africa, consisting of idols and images of carved wood from the Belgian Congo and a series of goldsmith's weights of cast brass from the Ashanti group of the Gold Coast. Various objects came from the Eskimo in Alaska and the Hudson Bay region. Mrs. Charles D. Walcott presented a twined baleen basket embossed with carved ivory, from Point Barrow, Alaska; Father Artheme Dutilly, of Catholic University, gave numerous objects, such as lance and harpoon heads, knives, combs, marrow extractors, drills, skin scrapers, and dice, carved from ivory and bone, obtained in an abandoned Eskimo site near Hudson Bay. The ethnological collections from Southwestern United States were augmented by a double-weave saddle blanket acquired from the Navaho in 1898 by D. I. Bushnell, Jr., and donated to the Museum by him. A collection of baskets, beadwork, pottery, and blankets made by some of the Pueblo and Navaho tribes came as a gift from Mrs. Benjamin H. Frayser. Thirty-one examples of old Ojibwa beadwork in the form of pouches, leggings, moccasins, and fans were received from Thomas G. Shearman. Miss Annie-May Hegeman donated a pair of bronze candelabra which belonged to the period of the first Napoleonic Empire and were signed by Thomire, a welcome addition to the collections dealing with heating and lighting instruments.

The section of ceramics emphasizes antique glass, porcelain, chinaware, and the more general fictile art manufactured in the United States, Europe, and Asia. Although it is not a strictly anthropological discipline, nevertheless the roots for most of this handicraft go back to man's simple beginnings, and for this reason it is administered by the division of ethnology. Eleven accessions containing 78 specimens were received in the section, including particularly a Parian pitcher given by Henry F. Nesbitt and sisters, and a collection containing Bohemian double glass, American Rookwood pottery, English Crown Derby, Wedgwood, Venetian glass, and Irish Belleek porcelain, loaned by Mrs. F. W. Mahin.

The section of musical instruments in the department is unique. The historical development and scope includes specimens from all over the world. The varied cultural aspects makes it outstanding among museum collections. Six accessions of 10 specimens were added during the year. These include a sixteenth century Italian lute, an Italian lyre-shaped harp, and other forms of European instruments donated by Miss Annie-May Hegeman. E. F. Droop and Sons Co. gave a Swiss music box, mounted on a veneered cabinet, made by C. Paillard et Cie. Stephen Waterman presented a C. F. Martin guitar made in New York about 1850.

The section of period art and textiles embraces, for the most part, embroideries, tapestries, and lace representing European period art textiles from the fifteenth to the nineteenth centuries. This section received 10 accessions totaling 57 specimens as compared to 43 specimens in the previous year. Here again we are indebted to Miss Annie-May Hegeman for a noteworthy collection of hand-woven and embroidered shawls and scarfs from Kashmir, India. A Bulgarian pillow lace-making ensemble was donated by Mrs. F. W. Mahin through Lt. Col. F. C. Mahin. A sterling silver caster made by Thomas Warner, of Baltimore, and a collection of salt dishes by J. E. Caldwell, Philadelphia, in 1850, were received as a bequest of Caroline H. Addison. Joseph H. Himes presented a carved ivory jewel box, an example of early German workmanship.

*Physical anthropology.*—In the division of physical anthropology 14 accessions totaling 555 specimens were received during the year. These are especially important because of their scientific value based on the fact that practically all the material came from selected sites and was obtained by specialists directly interested in its anthropological significance. As in the past, most of the skeletal collections came from Alaska. Two hundred and ninety-one specimens were obtained by Dr. Aleš Hrdlička during his field explorations; through Dr. Hrdlička Father Fox gave five from Hooper Bay, and O. J. Murie collected four from two islands in the Aleutians. A total of 227 were obtained by friends of the Institution. The late Judge W. J. Graham gave 144 from an Indian site at Potomac Creek, Stafford County, Va.; Mrs. A. L. L. Ferguson presented the contents of an ossuary containing 67 specimens from another important Indian site at Accokeek, Md., while Nicholas Yinger donated 16 specimens from the Hughes site along the Potomac River north of the District of Columbia near Poolesville, Md. A set of casts representing *Homo modjokertensis* and *Homo soloensis* I-XI was received through an exchange arranged by the Museum's division of paleontology with the Mining and Geological Survey Department in the Netherlands East Indies.

#### INSTALLATION AND PRESERVATION OF COLLECTIONS

The three divisions under the department of anthropology individually prepared temporary exhibits that were displayed each for one month in the foyer of the Natural History Building. Although these special exhibits required considerable time on the part of the curators, they were successful in portraying certain phases of the work in connection with the respective divisions.

During September the division of ethnology used the entire foyer to show portraits of some of the more important Indians painted by such well-known artists as George Catlin, John White, C. B. King,

J. M. Stanley, E. W. Deming, E. A. Burbank, and J. H. Sharp. The chronological arrangement of the pictures indicated the wealth of material now in the study series of ethnological collections.

During November a large collection of archeological and skeletal material from Kodiak Island and other important sites in Alaska was placed on exhibition by the division of physical anthropology—the result of explorations directed by Dr. Aleš Hrdlička since 1926.

From October 18 to November 5, 1937, a few paintings by Gilberto Antolinez, a Venezuelan artist using motifs from prehistoric pottery decorations, were exhibited under the sponsorship of Señora de Escobar Saluzzo and the Pan American Union.

The division of archeology, in cooperation with the Pan American Union, directed the installation of a unique exhibit showing specimens of exceptional artistic merit and scientific interest from Venezuela, Ecuador, and Peru, from the collections of Dr. Rafael Requena and Dr. Ernesto Franco. The exhibit was formally opened by the ambassadors and ministers of the South American countries represented in the collections. During December this display attracted the attention of 3,563 visitors.

*Archeology.*—Minor changes only have been made in the permanent archeological exhibits during the year. A few specimens were added to State collections in the American hall. In the hall of Old World archeology a series of ancient Greek pottery was condensed in order to accommodate several additions. Ancient coins, occupying two table cases, were removed in anticipation of transfer to the division of history. Fifteen watercolor reproductions of Upper Paleolithic art in Spanish caves were placed on exhibit for the first time, and a cast of the famous Bison of Tuc d'Audoubert, modeled in clay by a Paleolithic artist and discovered in 1912 near Saint-Girons, Ariège, France, was moved to a better-lighted section of the hall.

Laboratory tables were continuously occupied by collections being prepared for current or future accessioning. The William J. Graham collection from Potomac Creek, Va., presented by Mrs. Graham under date of April 5, 1938, was sorted by R. G. Paine and arranged for cataloging. Preliminary repairs on the pottery collected in 1936 by the Smithsonian-Peabody Museum Expedition to Honduras required much laboratory time and space during the fiscal year. In this latter undertaking the staff was assisted during July 1937 by Richard Woodbury, a student of anthropology at Harvard University. All minor accessions received during the year have been cataloged.

*Ethnology.*—The substitution of a number of modern dust-proof cases in the hall of period art and textiles is noteworthy in connection with the preservation and the appropriate display of art textile

exhibits. Simultaneously there was a complete rearrangement of specimens in that section due to the removal of biological exhibits to the west half of the hall. Opportunity was also taken by members of the staff, in connection with the shifting of individual exhibits, to rearrange, classify, and label collections and individual specimens when necessary. This rearrangement has greatly improved the exhibits and effected a more attractive and colorful display. At the same time the following new exhibits were added in this hall: European repoussé and period silver; porcelain figures from the Meissen factory at Dresden; embroidered fabrics from Turkey and the Near East; embroidered and hand-woven woolen fabrics from Kashmir, India; collections of European hand-made laces from the sixteenth to nineteenth centuries; and examples of Spanish, French, and early Italian brocades, velvets, and embroideries. Similarly, new labels were prepared for the ethnological exhibits, ceramics, and musical instruments as occasion required and time permitted.

New exhibits added to ethnology include a collection of fabrics with brocaded, painted, and decorated designs, from Japan, deposited by Mrs. Charles D. Walcott, and a collection consisting of Tibetan jewelry, presented by Mrs. Kate S. Freeman-Marsh, which now appear in the center of the Asiatic hall.

Exhibits in the ceramic hall were enriched through the addition of a collection of Wedgwood and hitherto unrepresented old English Bristol glass. The exhibit of early Venetian blown glass was enlarged, and material was added to the exhibit of Sandwich glass. Several of the exhibits as originally installed in the ceramic gallery were unclassified and were presented to the public as a unit exhibit primarily on the basis of their accession in the Museum as a gift or loan from one individual. Considerable time was spent by the staff in correcting and reclassifying such exhibits.

Reinstallation of all types of musical instruments other than keyboard instruments on the third floor of the rotunda has been practically completed.

The division's clerk-stenographer, Miss Vendla Hendrickson, in addition to her routine duties, has completed the subject index of Smithsonian anthropological literature. This has already proved highly useful in connection with the many routine letters of inquiry. Other indices recently completed deal with such subjects as historic Bibles and religious manuscripts, laces, fans, American Indian weavings, and keyboard instruments in the national collections arranged according to country of origin. The entering of current material in indices and catalogs, such as a catalog of paintings, catalog of photograph negative numbers, and the accession index cards, has been kept up to date.

Progress with study collections has been marked and accomplished primarily with the aid of a W. P. A. preparator and a stenographer-clerk. An adequate number of new-type storage cases and other facilities were provided by the Museum. The W. P. A. preparator assigned to the division was engaged throughout the year in arranging specimens in their proper locations.

*Physical anthropology.*—Besides the special exhibit during November, previously mentioned, a new case of exhibits was arranged showing the casts of primitive Javanese skulls received recently. Another case, showing the smallest and largest normal crania in the division collections, is now exhibited in the foyer of the Museum.

The W. P. A. workers, after numbering the foot bones of the Huntington collection, as noted in the last annual report, have taken up successively the humeri and tibiae of the same collection. In addition, they have cataloged the current small accessions as they were prepared. The W. P. A. artist is engaged in making drawings of specimens obtained by the curator on Kodiak Island.

Recently the storage space of the division on the fourth (attic) floor of the rotunda has been substantially increased. By moving all the Florida collections into this space, the remaining collections have been made much more accessible. Even with this additional space, the work of the division is still somewhat handicapped through the necessity of stacking the drawers instead of having them in racks.

*Anthropological laboratory.*—A considerable amount of restoration and repair as well as the completion of new projects was accomplished in the anthropological laboratory. Two hundred and ninety-six pieces of aboriginal earthenware vessels were restored. These long-delayed restorations were made possible largely through the assistance of skilled workmen from the Works Progress Administration. At the same time the regular staff of the laboratory completed the following assignments: 32 wooden bowls and miscellaneous specimens from the Aleutian Islands were dehydrated, treated with preservatives, restored, and painted; 3 plaster heads of African Negroes were restored and bronzed, as well as 4 plaster casts of Pygmy heads; a large cast of a sculptured head from Temple 22, Copan, Honduras, was painted to match the original; 5 Indian baskets from The Dalles in Oregon were repaired; 2 large casts of Indian villages were repaired; the turquoise settings on 2 silver pendants were remounted. The chief preparator and his assistant besides directing the above work completed seven plaster busts from facial masks. These were modeled, cast, and bronzed, illustrating the racial variations between selected American Whites, American Indians, and American Negroes. This extensive series will comprise a valuable addition to exhibits in the division of physical anthropology. Nine other busts were par-

tially completed at the close of the year. Numerous repairs and casts were also made for other departments in the Museum and outside Government agencies.

#### INVESTIGATION AND RESEARCH

A short paper dealing with general archeological problems in the United States was completed by the head curator of anthropology in collaboration with Dr. Julian Steward, of the Bureau of American Ethnology. As time permitted, his research was directed toward the publication of the results of the Smithsonian-C. W. A. archeological explorations at the Peachtree Mound and village site near Murphy, N. C., and of his own explorations at Marksville, La. En route to cave explorations in Texas, Mr. Setzler studied archeological collections from the Big Bend area in southwestern Texas at the Witte Memorial Museum in San Antonio and similar collections at the museum of the West Texas Historical and Scientific Society, Sul Ross State Teachers College, in Alpine, Tex. While visiting various archeological sites in New Mexico he took the opportunity to examine anthropological collections at the Carlsbad Archaeological and Historical Society Museum at Carlsbad, the University of New Mexico's Department of Archaeology and Anthropology Museum in Albuquerque, and the Laboratory of Anthropology in Santa Fe, N. Mex. Numerous conferences and consultations were devoted to archeological problems in connection with the Works Progress Administration and the National Park Service's Branch of Historic Sites. Upon request, suggestions were also offered with regard to the Irene Mound project near Savannah and the Ocmulgee National Monument at Macon, Ga.; Jamestown Island excavations, Virginia; and the large Tennessee Valley Authority archeological explorations in southern Tennessee and northern Alabama.

*Archeology.*—The curator, Neil M. Judd, continued with preparation of his report on the material culture of Pueblo Bonito. The assistant curator, Dr. Waldo R. Wedel made progress on his study of artifacts from Tulamniu, an old Yokuts village site near Taft, Calif., and also completed several preliminary reports on his explorations in Kansas.

During the year 53 lots of archeological material were received for examination and report and subsequently returned to the owners.

Upon invitation from the Carnegie Institution of Washington Mr. Judd attended a conference on Early Man in Southeastern Asia at the Institution on May 13, 1938. En route to his summer's researches in Kansas, Assistant Curator Wedel visited the Milwaukee Public Museum, the Field Museum of Natural History, Chicago, and the Missouri Historical Society, St. Louis.

*Ethnology.*—The curator of ethnology, Herbert W. Krieger, continued, as time permitted, studies of collections made in recent years on expeditions to prehistoric sites in the valley of the Columbia River in Washington and Oregon, and also in the Greater and Lesser Antilles. These investigations have resulted in one publication, a brief account of the expedition to the British and American Virgin Islands.

The associate curator, Henry B. Collins, Jr., continued his research on collections of Eskimo material excavated by him at prehistoric sites in Alaska on recent expeditions. This work resulted in two comprehensive publications of an important nature. In August he visited the National Museum of Canada at Ottawa to study the Eskimo collections from the Bering Strait and Hudson Bay regions.

Outside investigators were interested in a variety of collections in the division. Notable among the objects studied were the Walcott collection of replicas of Navaho sand paintings, ancient and modern textiles, the technology of the North American Indian, the Mongolian composite bow, the narrow loom weavings of the northern Woodlands and eastern Indian tribes, the belt loom weavings of the Pueblo Indians, head dresses of the Plains Indian tribes, West Indian basketry and Voodoo fetishes, fishing boats and devices of Oceania, and economic life in Micronesia, the historical collection of European stringed instruments, upright pianos, fire-making apparatus of primitive peoples, American glass, and historic Bibles and manuscripts.

Assistance was given the Index of American Design, the Bureau of Public Roads, the Office of Indian Affairs, the National Park Service, the Post Office Department in the appraisal of antiques damaged in the mails, the Department of Justice in the identification of stolen antiques, the Arts and Crafts Board in photographing designs on pottery, sculptures in wood, and other patterned objects, and the Office of Education in preparing data for radio script on the Eskimo, on laces and embroideries, on primitive music, and on the potter's art. Aid also was given to attorneys and other interested parties in connection with pending patent-infringement suits in which type specimens of keyboard instruments are of prime importance, and to a motion-picture company in photographing fire-making devices and primitive torches, candles, and lamps.

Twenty-nine lots of material received for examination were returned to owners with reports as to their identification.

*Physical anthropology.*—The curator of physical anthropology, Dr. Aleš Hrdlicka, devoted a large part of the year to the examination of the skeletal remains from Alaska, especially the Aleutian Islands. In addition, he undertook the preparation of a report on the stone lamps of Kodiak Island. He also assembled further data on the normal growth of the head during adult life.

The research of the assistant curator, Dr. T. Dale Stewart, consisted primarily of his studies on the Labrador Eskimo and Potomac River Indians. He also has in the course of preparation three papers dealing with the physical type of the bearers of the Hopewell culture in Missouri; accessory sacro-iliac articulations in the higher primates and their significance; and Negro skeletal remains from Indian sites in the West Indies. While in Cleveland during April he spent some time at Western Reserve University examining the anthropoid skeletal collections in connection with his studies of accessory sacro-iliac articulations.

Prof. C. J. Connolly, of the Catholic University of America, continued his study of the brain. Assistance in the identification of bones has been given during the course of the year, as in other years, to the Department of Justice and to numerous private individuals.

Nine lots of material were received for identification through official channels.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

During the year 112 archeological specimens and numerous photographs were sent as gifts to educational institutions; 148 specimens were sent to museums in exchange for other anthropological specimens; 154 objects were lent to museums and colleges and other Government departments for temporary exhibitions; 237 pseudoarcheological specimens and natural forms were condemned; 396 were withdrawn from the department; and 25 were transferred to other divisions and departments in the Museum.

#### NUMBER OF SPECIMENS UNDER DEPARTMENT

The total number of specimens in the department on June 30, 1938, was 686,781. This represents an increase of 1,258 specimens. Actually a larger number were received, but this figure represents the net gain after the necessary deductions had been made for those specimens removed during the same period. The following summary indicates the distribution in the various divisions and sections under the department:

Archeology -----	447,036
Ethnology -----	193,222
Physical anthropology-----	36,062
Ceramics-----	6,463
Musical instruments-----	2,359
Period art and textiles-----	1,639
 Total-----	 686,781

## DEPARTMENT OF BIOLOGY

(LEONHARD STEJNEGER, *Head Curator*)

THE favorable condition of the biological collections—except for crowding caused by lack of sufficient space—as regards preservation and routine business is credited largely to the assistance rendered by Works Progress Administration workers. Accumulations of arrearages caused by the inadequacy of the regular staff have been greatly reduced, and subsidiary work, which for lack of suitable personnel had not been attempted, has now been initiated.

Field work by members of the staff has included continuation of the zoological exploration of the Appalachian region. W. M. Perrygo collected in Tennessee during 1937, and at the end of the fiscal year was engaged in selected localities in Kentucky. Dr. L. P. Schultz and E. D. Reid investigated the fish fauna of the river systems of Virginia. A. H. Clark continued study of the butterflies of that State. An expedition undertaken by William N. Beach and J. Watson Webb to Alaska for the purpose of collecting material for a new moose group, as well as specimens of caribou and other mammals, was accompanied by W. L. Brown, chief taxidermist, and was crowned with eminent success. Dr. A. Wetmore, during a month's travel in Venezuela, added very materially to the collections of birds of the Museum. The National Geographic Society-Smithsonian expedition to Sumatra, under the direction of Dr. William M. Mann, director of the National Zoological Park, was of great importance to this department.

### ACCESSIONS

Accessions for the year amounted to 1,240, with a total of 241,461 specimens. Some of the more noteworthy accessions are listed under the various divisions as follows:

*Mammals.*—W. M. Perrygo, assisted by C. C. Lingebach and H. R. Schaefer, collected 305 mammals in Tennessee. Another important accession consists of 61 specimens secured by H. G. Deignan in Siam. William N. Beach and J. Watson Webb presented 27 large and small mammals, the result of their expedition into Alaska, including material for habitat groups of moose and caribou. E. J. Brundage donated 18 mammals from Ecuador and Harry A. Beatty 38 specimens from Venezuela and 6 from the Island of St. Croix, Virgin Islands. A particularly welcome gift was that of a mounted grizzly bear of a form now extinct (true *Ursus horribilis*) from Dr. C. Hart Merriam. The

specimen was killed in 1888 in the Missouri River Badlands near Lewistown, Mont. Of similar interest was a partial skeleton of the true *Cervus canadensis canadensis* donated by Karl Schmitt and R. G. Slattery, of Washington, D. C., of value because of the great scarcity of specimens of the eastern elk. Two accessions of whale material were of particular interest, viz., four small embryos entire and the head of a 10-foot specimen from Alaska, a gift from Marc A. Lagen, American Pacific Whaling Co., Bellevue, Wash.; also four whale fetuses and parts of the southern right whale, finback whale, blue whale, and killer whale, a gift from the Western Operating Corporation, of New York, through the United States Coast Guard. Ten skulls of Arctic foxes from Siberia were obtained in exchange from the U. S. S. R. Arctic Institute, Leningrad. Mrs. C. D. Walcott presented fine skins of a Canadian blue lynx and two black beavers. The numerically largest accession included 1,232 specimens transferred by the U. S. Biological Survey.

*Birds.*—The more important and valuable avian accessions include 427 skins and 17 skeletons collected by Dr. A. Wetmore during his expedition to Venezuela. Specimens collected by H. G. Deignan in Siam consisted of 1,031 skins, 103 skeletons, and 4 eggs. The Tennessee work under W. M. Perrygo, assisted by C. Lingebach and H. R. Schaefer, resulted in 1,056 skins, 8 skeletons, and 12 alcoholic specimens. Dr. D. C. Graham, Chengtu, collected 116 bird skins in Szechwan, China. Col. J. Hammond, Germantown, Tenn., donated 3 skeletons of the imperial woodpecker. In exchange with the Natural History Museum at Vienna 20 specimens of African birds new to the National Museum were obtained, and with the Natural History Museum at Leiden, a skin of the New Guinea rail *Megacrex*. Similarly, 24 skeletons of European birds were received from the Zoological Museum at Copenhagen. The anatomical collection obtained by purchase 297 skeletons of neotropical birds from H. W. Beatty, 36 skins from Angola were purchased from K. M. Prior, and 19 skins from Rhodesia from D. Townley. A skin of the rare pink-headed duck *Rhodonessa caryophyllacea* was presented by A. Ezra, Surrey, England, an interesting and valuable addition.

*Reptiles and amphibians.*—The accessions of this year equal those of last year both in number and scientific value. Among the more important may be mentioned 307 reptiles collected by Prof. S. T. Danforth in the Lesser Antilles, chiefly on Saba Island, St. Vincent, and the Grenadines; 227 specimens from Siam collected by H. G. Deignan. The Perrygo Tennessee expedition yielded 93 specimens, and the National Geographic Society-Smithsonian expedition 86 specimens, chiefly from Ceram and Sumatra. C. R. Aschemeier collected 39 specimens in Florida, among them 25 interesting turtles. An important collection from Brewster County, Tex., was received from H. Maier

and T. F. Smith, and another from Vermont and Maine from J. Fowler and H. J. Cole. From Brazil Fritz Plaumann sent 31 frogs and toads. Through the Field Museum of Natural History, Chicago, an interesting collection of Central American salamanders of the genus *Oedipus* was received, consisting of 17 specimens representing 9 species. Prof. E. R. Dunn presented 9 mud turtles from Panama and Costa Rica, and Dr. A. F. Carr two paratypes of an undescribed subspecies of turtle from Florida. G. S. Miller, Jr., donated a general collection of 117 specimens.

*Fishes.*—The total number of fish specimens accessioned during the year was 43,350, a great increase over previous years. Among the most important collections may be mentioned two transfers from the United States Bureau of Fisheries, one containing 5,098 specimens, among them 492 vials of larval fishes, from various localities, used by Dr. S. F. Hildebrand in his studies on the young stages of Atlantic marine fishes; the other consisting of 7 types of fishes collected by J. B. Shropshire, S. F. Hildebrand, and A. O. Foster in the Canal Zone in Panama during 1935 and 1937. The numerically greatest addition was received from the Bingham Oceanographic Foundation, Yale University, through Dr. A. E. Parr and the United States Bureau of Fisheries, consisting of 12,780 specimens from the Middle Atlantic coast of the United States. The Carnegie Institution of Washington presented 6,201 specimens from the Tortugas and the Dutch East Indies collected by the late Dr. W. H. Longley. The National Geographic-Smithsonian expedition to Sumatra under Dr. W. M. Mann yielded 2,765 fishes, and the Smithsonian-Hartford expedition of 1937 brought in 973 fishes from the West Indies collected by Dr. W. L. Schmitt and G. R. Lunz. From the Tennessee Valley Authority, through Dr. C. L. Hubbs, 404 fish specimens were received. H. G. Deignan contributed 1,285 fishes from Siam. By transfer from the United States Biological Survey, 125 fishes from the Aleutian Islands, including types of two new species of cottids, were added to the collection. A number of paratypes of recently described species were received from the Field Museum of Natural History, the California Academy of Sciences, and Stanford University. The Bass Biological Laboratory, through S. Springer, contributed 50 specimens, including the type of a new species of shark from off Englewood, Fla. By exchange, 240 specimens representing about 141 species from the waters of the Soviet Union were obtained from the Pacific Scientific Institute of Fisheries and Oceanography, Vladivostock, and 36 specimens of marine fishes from the Patagonian region from the British Museum of Natural History. There were also added 1,611 specimens from Dr. L. P. Schultz collected in the Yellowstone National Park; 6,814 specimens from Virginia collected by Dr. Schultz and E. R. Reid; and 1,862 obtained by C. R. Asche-

meier in Florida. A fine example of mounted tuna was presented by Michael Lerner, of New York, and a mounted wahoo fish (*Acanthocybium solandri*), the only specimen of this species in the collection, was obtained by purchase.

*Insects.*—The number of specimens of insects added during the year aggregates 101,854, as against 159,021 during the previous year. The more important accessions include the following: The Blackmore collection of Lepidoptera, amounting to 2,111 specimens, mostly from the Pacific Northwest, donated by Mrs. Florence Blackmore; the Quirsfeld collection of weevils, amounting to 1,157 specimens, donated by E. D. Quirsfeld; a small but valuable collection of reared Coleoptera larvae of about 50 species, received from Dr. J. P. Kryger of Copenhagen, Denmark (this material was reared and assembled by H. P. Sønderup); a collection of approximately 15,000 specimens of ants, received from Dr. M. R. Smith, of the United States Bureau of Entomology and Plant Quarantine; about 10,000 specimens of Chinese insects, obtained from Dr. D. C. Graham of Chengtu, China. By transfer from the Bureau of Entomology and Plant Quarantine approximately 54,000 insects, received for identification, were added to the Museum collection.

*Marine invertebrates.*—The total number of accessions for the year is 143, bringing to the Museum 15,300 specimens, 2,348 more than last year. The leading accessions, mostly specimens new to the collections or type material, are as follows: From the Hancock Pacific expeditions 4 hermit crabs, comprising holotypes and paratypes of two new species; from the Smithsonian-Hartford expedition, through Dr. W. L. Schmitt, a collection of marine invertebrates taken in the West Indies in the spring of 1937; from Samuel Stockton Miles, Baltimore, Md., 1 slide mount of a new genus and species of hydroid; from Capt. Robert A. Bartlett, New York, a collection of about 1,000 marine invertebrates taken in West Greenland during the summer of 1937; from Dr. M. W. de Laubenfels, Pasadena, Calif., 48 lots of sponges collected in Panama in 1933, including types of 9 species; from Dr. Norman T. Mattox, University of Illinois, 9 specimens of phyllopods, comprising types, allotypes, and paratypes of two new species; from Leslie Hubricht, Missouri Botanical Garden, cotypes of one new species of amphipod; from Dr. Stillman Wright, Ceará, Brazil, a collection of copepods from South America, including specimens of four species of *Diaptomus* collected at the type localities and four species of *Boeckella* from various localities; from Prof. W. H. Bayliff, St. Johns College, Annapolis, Md., 14 specimens of isopods representing cotypes of a new species; from Horton H. Hobbs, Jr., University of Florida, 3 crayfishes from Florida, comprising holotype, allotype, and paratype of a new species; from Harvey C. McMillin, Seattle,

Wash., 6 parasitic copepods, including type of a new species, from Steve A. Glassell, Beverly Hills, Calif., 5 hermit crabs, comprising paratypes of three new species; from Dr. A. L. Treadwell, Vassar College, two marine annelid worms, comprising paratypes of two new species; from Bernard V. Travis, Tallahassee, Fla., two slide mounts, comprising types of two new species of Protozoa; from Lawrence D. Townsend, Seattle, Wash., 15 specimens of parasitic copepods including paratypes of a new species; from the Bingham Oceanographic Foundation of Yale University, 4 specimens of shrimps, comprising cotypes of two new species; from Leslie Hubricht, St. Louis, Mo., about 150 amphipods, including cotypes of 1 new species and about 95 isopods, including cotypes of 2 new species; and from Martin W. Johnson, Scripps Institution, 7 lots of copepods, including holotypes of 1 new subspecies and 2 holotypes of a new combination.

*Mollusks.*—The outstanding accession for the year in the division of mollusks was the Bohumil Shimek collection of loess shells, obtained through purchase by the Frances Lea Chamberlain Fund. The collection consists of both fossil and recent species, covering nearly 25,000 lots and including more than a million individual specimens. Another exceedingly important acquisition is that of 720 specimens of Chinese land and fresh-water mollusks of the Heude collection, Swatow, China, including 265 cotypes of Père Heude's species. D. Thaanum, Honolulu, contributed 1,936 Hawaiian shells. Dr. Carlos de la Torre, Habana, donated 64 specimens of land shells, mostly types of new species and subspecies from Cuba. Other important additions were: From Dr. H. J. Finlay, Geological Survey of New Zealand, 116 specimens of Turritidae from New Zealand; from Dr. S. Stillman Berry, Redlands, Calif., 3 paratypes of West American shells; from the Hon. Guy M. Gillette, 3 specimens of shells from Oahu, Hawaii; from the Museum of Comparative Zoology, topotypes of four species (37 specimens) of land shells; from Mr. and Mrs. Sozon Vatikiotis, Tarpon Springs, Fla., types of 3 species of marine shells from Florida; from Dr. Henry A. Pilsbry, Academy of Natural Sciences of Philadelphia, 4 topotypes of two species (*Humboldtiana*) and 5 specimens of *Chondropoma caymanense* Preston; from Dr. Fu-ching Li, Honan University, China, 4 paratypes of *Oncomelania anhuinensis* from Huichow, Anhui, China; from Miss Myra Keen, Stanford University, 5 paratypes of California mollusks; from Gordon M. Kutchka, Carnegie Museum, Pittsburgh, 5 paratypes of 2 species of mollusks from Alabama; from Ralph W. Jackson, Cambridge, Md., 121 mollusks, including the types of a new species and subspecies from Ecuador; from Wray Harris, Luma, Samoa, paratypes of 3 species of *Triphora* from Samoa; from Dr. George R. Hunt, Fairmont (W. Va.) State Teach-

ers' College, 63 mollusks, including types and paratypes of *Paravitrea reesei* Morrison, from West Virginia; from Adolf Sitsch, Radomys'l nad Sanem, Poland, 426 mollusks from Poland, Czechoslovakia, Bucovina, and Rumania; and from the National Geographic Society-Smithsonian expedition to Sumatra, 125 mollusks.

*Helminths*.—The total number of accessions for the fiscal year is 29, representing 167 specimens. While this is a smaller number of specimens than were accessioned last year, a much higher percentage is type material. The more important are the following: From Dr. E. E. Byrd, University of Georgia, 7 types of trematodes; from Prof. Eduardo Caballero y C., Laboratorio de Helmintología, Mexico, the type of *Oxyspirura toroi* and 3 cotypes of nematodes (*Kalicephalus humilis*); from Dr. Harry J. Lawler, Johns Hopkins University, type of the cestode *Cylindrotaenia quadrijugosa*; from Dr. H. W. Manter, University of Nebraska, 6 lots of Platyhelminthes, types and paratypes, 4 slides of Platyhelminthes (types), and 2 types of trematodes; from Dr. F. G. Meserve, Dr. H. W. Manter, and Capt. G. Allan Hancock, 20 types and 1 paratype of ectoparasitic trematodes; from Dr. John D. Mizelle, Oklahoma Agricultural College, 22 slides of ectoparasitic trematodes (types), 1 type of parasitic worm, and 14 paratypes of helminths; from Louis Olivier, New York University, 3 specimens of helminths (1 type and 2 paratypes); from Dr. A. S. Pearse, Duke University, type of the platyhelminth; *Eustylochus meridionalis* Pearse; from Dr. Bruce D. Reynolds, University of Virginia, type of *Brachylaemus peromysci* and 1 slide of *Brachylaemus virginianus* (topotype); from Bernard V. Travis, Tallahassee, Fla., 3 slides of type material of *Giardia*; from Donald Ameel, University of Michigan Biological Station, 3 slides of helminths (*Euryhelmis monorchis*), 1 of which is a cotype; and from Sterling Brackett, University of Wisconsin, 8 slides of helminths, cotypes of *Dracunculus ophidensis*.

*Corals*.—Two lots of corals, consisting of 24 specimens, were accessioned this year. Two were type specimens received from Prof. H. Yabe, Institute of Geology and Paleontology, Tohoku Imperial University, Japan.

*Echinoderms*.—The number of accessions received during the year was 13, one more than last year. The number of specimens included was somewhat over 1,000, chiefly from the Caribbean Sea and the Arctic Ocean. The most noteworthy accession consisted of 451 specimens collected by the Smithsonian-Hartford expedition in the full-rigged ship *Joseph Conrad* to the West Indies, including three new species; also a long series of young individuals showing growth stages. Another noteworthy accession, from the U. S. Biological Survey, was a collection made by Dr. Victor B. Scheffer in the

Aleutian Islands, including representatives of a new genus of starfishes belonging to the family Ganeriidae, a family previously unknown from the Pacific north of the Magellanic region.

*Plants.*—The number of accessions for the year is 332, consisting of 36,536 specimens, as against 372 lots and 45,438 specimens during the previous year. The more important accessions are as follows: From the U. S. Bureau of Plant Industry, 19 lots from many different sources aggregating 5,861 specimens; 1,380 specimens from a little-known region of Columbia collected by Dr. Oscar Haught; 2,018 specimens from the New York Botanical Garden in exchange, including 350 Puerto Rican algae and 1,507 specimens collected in Florida by Dr. John K. Small; 1,521 specimens of tropical American plants, and photographs of type specimens in European herbaria, received from Field Museum of Natural History, in exchange; 1,562 specimens from various sources, received from Gray Herbarium of Harvard University in continuation of exchanges; 473 specimens from Venezuela, gift of Prof. Henri Pittier, Caracas, Venezuela; 4,200 specimens from Virginia, gift of H. A. Allard; 542 specimens collected by Dr. Ducke in Amazonian Brazil, purchased; 787 specimens of Hepaticae mainly of the Verdoorn Exsiccatae, gift of Miss Caroline C. Hayes, Highlands, N. J.; 706 specimens from Brazil and Sumatra received from Boris A. Krukoff, mainly in exchange; 861 specimens, mostly from Mexico and Central America, from the University of Michigan in exchange; 753 specimens from Guadeloupe and Martinique, gift of Dr. H. Stehle, Pointe-à-Pitre, Guadeloupe; 283 specimens collected in South America by Mrs. Ynes Mexia, obtained by purchase; 415 specimens from western Texas received from Prof. Omer E. Sperry; 200 specimens mostly from tropical America, from the Royal Botanic Gardens, Kew, in exchange; 344 specimens from California and Nevada from Percy Train, Lower Rochester, Nev.; 264 specimens from California and Nevada from Dr. Ira W. Clokey as a gift, and 309 in exchange; 698 specimens from Cuba, Maryland, and Virginia, gift of Ellsworth P. Killip; 243 specimens from Brazil from the Instituto de Biologia Vegetal, Rio de Janeiro, in exchange; 264 specimens from Oaxaca, gift of Dr. Emil Makrinius, Cafetal Concordia, Oaxaca; 672 specimens from Utah, from the Brigham Young University; 267 specimens from Costa Rica from Dr. Alexander F. Skutch; 531 specimens from Minnesota, from the University of Minnesota, in exchange; 400 specimens from Washington, from J. William Thompson, in exchange; 634 specimens of lower cryptogams collected for the Museum by E. C. Leonard; 283 specimens, largely ferns, from the Hawaiian Islands, gift of Otto Degener; and 275 ferns from Peru, received from C. Bües.

## INSTALLATION AND PRESERVATION OF COLLECTIONS

The rearrangement of the birds in the District of Columbia faunal exhibit was completed during the early part of the year. Another important change in the exhibition series of the department in the northwest range, second floor, was next undertaken. Previously this range, which is occupied jointly by the departments of anthropology and biology, was divided lengthwise, the alcoves on the south side being occupied by biology. In the new arrangement the whole width of the eastern half has been allotted to anthropology and the western half to biology. This necessitated the dismantling of the barnyard group and its reinstatement, and the rearrangement of the exhibits of domestic pigeons, albino birds and mammals, insects, and corals. The change is a great improvement. In the skeleton hall the exhibit of seal skeletons was improved by the installation of the remounted male sea-lion skeleton and the cleaning and rearrangement of the others. In the fish hall, the exhibit of fishes in alcohol was condensed so as to free one floor case for the exhibition of a series of mounted Florida fishes. In addition, a large mounted tuna presented by Michael Lerner, a large mounted wahoo, and a large ocean sunfish were placed on exhibition. An impalla antelope, two Asiatic civets, and a young puma were added to the mounted mammal exhibit. Several new casts of amphibians were added to the District of Columbia faunal exhibit, and five mounted grass parakeets to the case showing color variation in birds.

In the division of mammals considerable shifting was done in the collection of small skins. The part that includes the Muridae, Cricetidae, Microtidae, and others, has been thoroughly cleaned, relabeled, checked, and rearranged. The caribou skins were placed in two cases. Considerable work was done in expanding the small-skull collection in additional quarter-unit cases. In the attic some work was possible in checking, cleaning, and collecting the necessary information for relabeling the cases and trays of the skulls and skeletons of the larger mammals. Thanks to the addition of new storage cases, it has now been possible to work the Merriam collection of mammals into the general series. In the alcoholic series a general overhauling was undertaken. Wooden barrels with sealed covers, mounted on trucks, were supplied during the year for the storage of large mammals preserved in alcohol.

The work of the chief taxidermist and his assistants was concentrated on the preliminary operations concerned with mounting the group of moose collected during the Beach and Watson expedition to Alaska. The skins have been prepared, plans and miniature models of the group have been made, and full-size models of the

animals have been begun. The taxidermists skinned 41 mammals, making 22 into skins and salting 19; a mounted grizzly bear was dismounted and prepared as a study skin; 33 large and medium skeletons and 466 skulls of various sizes were cleaned. By outside contract 1,488 small and middle-size skulls and 39 skeletons were cleaned. A duplicate cast of the pygmy sperm whale for exchange was made.

In the division of birds the work of rearranging the collections was continued, involving the moving of about 700 cases and the rearrangement of the specimens in about 400 cases. Fifteen cases of skeletons were rearranged and the contents condensed. The identification of the study series was continued. Dr. E. M. Hasbrouck went through the entire series of specimens in 29 passerine families and the family Picidae, checking all labels where the data seemed incomplete and putting proper Museum labels on all specimens not already so provided. The card catalog of scientific names applied to birds was increased by about 750 cards. The entire collection of nests and eggs, totaling 96 quarter-unit cases, has been moved, rearranged, and installed in new quarters on the second floor. The cases were painted and new furniture was installed, to make available an excellent workroom for students of the collection. Of birds received in the flesh 53 were made into study skins, 52 skins were degreased and made over, 612 bird skeletons were cleaned, and 202 were roughed out; 110 skeletons were cleaned by outside contract.

In the division of reptiles 2,543 specimens were card-cataloged and placed on the shelves in the stacks; the receipt of 30 metal shelves relieved overcrowding to some extent. The entire collection of turtle skins was repoisoned, 194 turtle skins were made up, 106 skulls cleaned, and 68 shells and 2 skeletons were cleaned.

In the division of fishes a great deal of general routine and back work was completed, including identification, cataloging, bottling, labeling, and card-indexing, the changing of about 8,000 cork-stopper bottles to glass-covered jars, and the resealing of all crocks and barrels (about 400 of the former and 28 of the latter) with new wax mixture. The condition of preservation of the study collection was greatly improved by this resealing and by installing 28 new barrels to replace old rusty steel drums. With the exception of about 15,000 cork-stopper bottles still remaining, the study series is now in good condition.

Work in the study collections of insects progressed steadily and their condition, on the whole, is good, but as in most other divisions additional space is urgently needed to allow the incorporation of material already at hand. All the insect collections received the care necessary to insure their maintenance in good condition. Further-

more, in all the insect groups there was more or less sorting and incorporating of material from collections previously received, and the reference collections of numerous small subdivisions of all the principal orders were rearranged to conform with the results of recent studies. In the Scarabaeidae rearrangement was made in the subfamilies Melolonthinae and Aphodiinae. There was extensive incorporation and rearrangement from the Barnes, Brooklyn Museum, and National Museum collections of Lepidoptera, especially in the Acronictinae and the Geometridae. In the Diptera the Calliphoridae were entirely rearranged. Work was continued on the labeling and arrangement of the Culicidae, 100 additional drawers in this series being put in order during the year, and the large alcoholic collection of mosquitoes assembled by Knab and Busck was reviewed and rearranged. There was also some rearrangement in the Asilidae, Stratiomyidae, Syrphidae, and Phoridae. The Nearctic collection of the hymenopterous genus *Timulla* was put in order on the basis of recent revisionary work, and this was done also for certain genera of sawflies, upon which Dr. H. H. Ross has published recently. Through the temporary employment of Dr. B. D. Burks, of the Illinois State Natural History Survey, the material of the chalcideid genus *Tetrastichus* was worked over preparatory to revision. In the Heteroptera the transfer of material to trays was continued and is now completed for all the Nearctic collection except the Cydnidae, Anthocoridae, and several aquatic families. Considerable progress was also made in the identification and rearrangement of the Neotropical material of the more important families. Much further work was done in the sorting and incorporation of the large collections of Homoptera obtained by P. W. Oman on several visits to the Western States between 1933 and 1937, but, while very noticeable progress was made, a good deal of time is still required to complete this work, since the quantity of material is very large. The alcoholic collection of Zoraptera was reviewed and sorted and has served as a basis for A. B. Gurney's revision of the group, which was published during the year. There was also considerable expansion of the Orthoptera collection, and with the assistance of W. P. A. personnel the Caudell library of reprints on Orthoptera and the neuropteroid families was reorganized. In the Coleoptera, specimens of many weevil genera from the Bovie, Baker, Gorham, and Old National Museum collections were combined, trayed, and rearranged. This is also true for the South American Otiorhynchidae. The remainder of the Wickham collection, the Quirksfeld collection of North American weevils, and much of the Wade collection, which was received during the year, were transferred to trays and incorporated. Much new definitely determined larval material in the Lepidoptera, Coleop-

tera, Diptera, and Hymenoptera was received during the year, largely through the Bureau of Entomology and Plant Quarantine, and was incorporated in the regular collections. The larval collection of Gracilariidae (Lepidoptera) was completely rearranged, and minor improvements were made in the arrangement of many groups of Coleoptera and Lepidoptera. Probably the most marked improvement occurred in two groups for which specialists were obtained during the year. The ant collection, since the appointment of Dr. M. R. Smith in September 1937, has received much attention. The work of rearranging was completed for four small subfamilies and was begun on the Myrmicinae, one of the largest. The Bureau of Entomology and Plant Quarantine had not had a specialist in Thysanoptera until Dr. Floyd Andre was appointed to this position in March 1938. The Museum collection contained only about 600 slides and that of the Bureau about 4,000. All the material has now been combined into one National Museum collection and entirely rearranged.

The study collections of the division of marine invertebrates continue to be in good physical shape. Considerable headway was made in classifying unidentified Crustacea, but work in other groups is more or less at a standstill for want of a sufficient staff as well as of outside trained specialists having the knowledge or inclination to make great numbers of routine identifications. Dr. R. S. Bassler, as custodian of the collection of Recent Bryozoa, reports a fair amount of preparatory and photographic work accomplished. A dozen or more collections of dried material, mainly from the Pacific, were cleaned, mounted, and separated into species preparatory to a definite identification by means of photography. This work has proceeded to such an extent that many of the old-time collections consisting mainly of debris with incrusting Bryozoa have been sorted and the valuable material put in biologic series.

In the division of mollusks the outstanding work was the labeling of an enormous amount of specimens and preparing them for intercalation in the study series. This accumulation, due to lack of assistance in the past, is now being reduced by W. P. A. workers, who have labeled and cataloged more than 29,600 lots of material.

For better and more convenient housing, the entire collection of helminths in the care of the zoological division of the United States Bureau of Animal Industry was transferred to the building of the Department of Agriculture and is rapidly being brought up to date.

The return of Dr. T. Wayland Vaughan, honorary custodian of the collection of corals, made it possible to catch up with some of the arrearages in this group.

In the division of echinoderms some rearrangements were made in the collections of dried starfishes and sea-urchins, in addition to con-

siderable work on the alcoholic collection, while the work of identifying and cataloging specimens was continued.

In the division of plants 31,760 mounted specimens of flowering plants and ferns were stamped and recorded. Of this material most of the Old World and South American specimens were incorporated in the herbarium; the United States, Mexican, and Central American specimens are now being incorporated together with last year's accumulation from the same regions. About 8,000 mounted specimens await stamping and recording. During the year 34,405 were mounted, wholly by adhesive straps, 24,051 of these by contract and 3,663 by W. P. A. personnel. For the first time in nearly 30 years there is on hand no accumulation of specimens awaiting mounting. The moss and algae herbaria were given attention by E. C. Leonard as in previous years. J. A. Stevenson, honorary custodian of the G. C. Lloyd mycological collection, reports that the herbarium in his charge was consulted freely by visiting mycologists during the year in connection with current problems, and he refers especially to its great usefulness in a revision of the tropical American species of Polyporaceae upon which he is engaged. The segregation of type specimens of American flowering plants was continued by E. P. Killip and E. H. Walker, the number of types segregated during the year being 949. However, it was deemed best to remove from the type herbarium to the general herbarium 369 mounted photographs that were unaccompanied by specimens, so that the net gain to the type herbarium is 580. This brings the total number of specimens in the type herbarium to 21,447, all of which have been cataloged and placed in durable individual covers.

#### INVESTIGATION AND RESEARCH

The curator of mammals, Gerrit S. Miller, Jr., has continued his special study of the Primates. The assistant curator, Dr. Remington Kellogg, in addition to preparing an annotated list of the mammals of Tennessee based on the collections of W. M. Perrygo and his associates, continued studies of the Miocene Cetotheres and the porpoises of the genus *Prodelphinus*. During the two last months of the year he was detailed by the State Department as delegate to international conferences on whaling at Oslo and London.

Dr. Herbert Friedmann, curator of birds, continued his work on the monograph on "The Birds of North and Middle America," making progress on the part devoted to the gallinaceous birds. He finished three short papers on cowbird hosts, left-“handedness” in parrots, and Alaskan bird bones. The associate curator, J. H. Riley, completed the manuscript on the birds collected by the late W. L. Abbott in the islands off the west coast of Sumatra and began a study of the Bornean collections made by Abbott and Raven, in the course of which

work he published descriptions of three new birds. Dr. Alexander Wetmore, as time and opportunity permitted, worked on fossil birds and on the birds collected in West Virginia and Tennessee, publishing a report on the West Virginian material.

The studies of the tortoises and turtles of North and Middle America by Dr. Leonhard Stejneger, curator of reptiles, received new stimulus by the receipt of considerable important new material during the year. Dr. Doris M. Cochran, assistant curator, completed her manuscript on the frogs of southeastern Brazil.

Dr. L. P. Schultz, curator of fishes, continued his research on the Virginia fish fauna and made a preliminary revision of the fishes of the genus *Catostomus*. He published descriptions of a new genus and two new species of cottoids from the Aleutian Islands and prepared a paper on the length-weight relationship of large sharks and whales. He continued with Dr. C. L. Hubbs a joint study of the genus *Porichthys*. E. D. Reid, aide, assisted the curator in revisions of the genera *Opsanus* and *Rypticus* as well as in the Virginia ichthyological survey. He also did some preliminary work on the blennoid fishes of the genus *Ophioblennius*. Dr. Hugh M. Smith, associate curator in zoology, has been engaged in the study of Siamese fishes, preparing a complete catalog of the fresh-water fishes of Siam.

In the division of insects, the curator, Dr. E. A. Chapin, prepared for publication several short papers on different groups of Scarabaeidae and made progress in the study of the West Indian Aphodiinae, in connection with which he found it necessary to examine most of the species of the genus *Ataenius* from North, Central, and South America in an endeavor to detect certain species introduced by commerce into the West Indies.

Dr. A. G. Böving continued studies bearing on the classification of the coleopterous larvae of the genus *Phyllophaga* and published a preliminary key to the mature larvae of 43 species with the object of inviting criticism and stimulating interest in rearing. He also began larval studies of Nitidulidae, Anobiidae, and Curculionidae. Dr. W. N. Anderson completed and published determination of characters for the separation of *Naupactus leucoloma*, the "white-fringed beetle," and other related curculionid larvae found in the same situations, as well as a paper containing extensive descriptions of two species of chrysomelid larvae. Dr. M. W. Blackman completed a review of the scolytid genus *Chramesus* in North America and a review of the bark-beetle genus *Cactopinus*, including three new species. His revisional study of the scolytid genus *Hylastes* is well under way. L. L. Buchanan completed a manuscript on the species of weevil genus *Pantomorus* which is of great importance as it includes the two species of destructive "white-fringed beetles" recently introduced into the

Southern States. W. S. Fisher made considerable progress on a study of the buprestid genus *Chrysobothris*. H. S. Barber completed certain studies in the common striped cucumber beetle and allied species.

August Busck completed his studies of the lepidopterous genus *Gelechia* and began generic revisions of the families Momphidae and Phaloniidae. Carl Heinrich made definite progress in the classification of the American Phycitinae, the first part of which was completed and submitted for publication. Dr. William Schaus, as the result of his studies in Neotropical Lepidoptera, prepared three papers describing about 75 new species. J. F. G. Clarke was occupied with a revision of the lepidopterous family Cecophoridae. His review of a group of American moths allied to *Bombycia* was completed and submitted for publication, while studies in Noctuidae and Geometridae are in various stages of preparation.

Revision of the fruit-fly genus *Anastrepha* by Dr. Alan Stone was enlarged so as to include the number of new species discovered during recent years. D. G. Hall's revision of the blow flies of America is approaching completion, and a study of North American bot flies was recently started. C. T. Greene worked continuously on the classification of the families of Diptera.

Dr. M. R. Smith completed and submitted for publication several papers on ants. One covering the North American ants of the genus *Proceratium* is in preparation. Grace A. Sandhouse has a revision of the North American bees of the genus *Osmia* in an advanced stage of preparation, while her review of the North American wasps of the genus *Trypoxyylon* is largely finished. R. A. Cushman reports further progress in the revision of the North American species of the ichneumonid genus *Ophion*. His study of the genus *Lysiognatha* was completed and published during the year. A. B. Gurney continued a revision of the genus *Orphulella* and finished a synopsis of the order Zoraptera.

Dr. H. E. Ewing completed and submitted for publication a key to the genera of chiggers (Acarina) of the world and a paper on the North American mites of the subfamily Myobiinae; work on a catalog of Anoplura is well advanced. Intensive work was done by H. G. Barber in the genera *Nysius*, *Blissus*, and *Triatoma*, as well as on the Reduviidae and Lygaeidae of Cuba, while a review of the genus *Crotophius* was completed and submitted for publication. P. W. Oman continued and nearly completed investigations on the *lateralis* complex of the cicadellid genus *Oncometopia*. Jointly with Nancy H. Wheeler he completed and published a paper on the North American empoascan leafhoppers of the *aspersa* group. Work on the generic revision of the North American Cicadellidae was continued. Dr. P. W. Mason was occupied with a revision of the North American species

of the aphid genus *Myzus*. A paper clearing up the confusion surrounding the identity of a complex of 12 species of the genus *Parlatoria* was submitted for publication by Dr. Harold Morrison, and a similar problem in the genus *Leucaspis* was continued awaiting additional material. A revision of the genus *Cerococcus* is nearing completion, and the manuscript of a study in the genus *Margarodes* was in large part completed. A revision of the scale-insect genus *Asterolecanium* by Louise M. Russell is in an advanced stage of preparation. A generic revision of the North American Thysanoptera was begun by Dr. Floyd Andre.

In the division of marine invertebrates the curator, Dr. Waldo L. Schmitt, completed a manuscript on the stomatopods of the west coast of America, based largely on collections made by the Hancock expeditions. A résumé of the American records of the fresh-water jellyfish *Craspedacusta sowerbyi* was prepared and was accepted for publication by the American Naturalist. Clarence R. Shoemaker, assistant curator, continued work on the large collection of marine amphipods taken in the course of the William Beebe Bermuda investigations. He prepared an extensive revision of the amphipods of the west coast of America. James O. Maloney, aide, completed the description and figures of a new species of *Asellus* from the Southern States. Dr. Mary J. Rathbun, associate in zoology, continued her studies of both Recent and fossil crustaceans. Dr. J. A. Cushman, collaborator in Foraminifera, continued studies of the Museum material in preparation of a series of monographic reports on the various family groups. Dr. C. B. Wilson, collaborator in copepods, reports as follows on his activities for the year: "Much of the plankton collected by the United States Fisheries steamer *Albatross* from 1883 to 1906 was sent to Dr. G. O. Sars for a report on the copepods it contained. Sars identified about two-fifths of the material sent him, and after his death the entire lot was placed in my hands in July 1937, together with Sars' identifications and drawings. I verified the species he had determined, copied the drawings he had made, and described the new species he had established. I also identified the remaining three-fifths of the material sent to him. About half as much more material was forwarded from the United States National Museum collected by the *Albatross* during the Philippine expedition in 1907 to 1910. This material was sent to me to supplement the former lot, and I have it about two-thirds identified and plan to include the results with those of the material sent to Sars. Thus far the Philippine plankton has proved to be far more productive than that from other localities."

Dr. Paul Bartsch, curator of mollusks, in conjunction with Dr. Carlos de la Torre completed a report on the operculate land mollusks of Cuba belonging to the subfamily Chondropominae. Another vol-

ume on the Chondropominae of the rest of the Antilles was almost completed by Dr. Bartsch, whose researches in conjunction with Dr. Harald A. Rehder on the Hawaiian marine gastropods also are in progress. He also continued his breeding experiments with *Goniobasis* in the Potomac drainage.

In the division of echinoderms the curator, Austin H. Clark, made considerable progress in the preparation of the next part of the "Monograph of Existing Crinoids." His report upon the Crinoidea of the Australasian Antarctic expedition under Sir Douglas Mawson was published, as well as his report upon the echinoderms of Hudson Bay, based upon the collections of the Canadian steamer *Loubyrne*. A report on the echinoderms of the Smithsonian-Hartford expedition in the *Joseph Conrad* was completed and is now in press. Work was continued on the echinoderms of the Johnson-Smithsonian Deep-Sea expedition to the Puerto Rican Deep.

In the division of plants Dr. W. R. Maxon and C. V. Morton prepared jointly a revision of the American species of *Dryopteris*, subgenus *Meniscium*, which is in process of publication. The monograph of the American species of Passifloraceae by E. P. Killip, associate curator, appeared recently in two large volumes. C. V. Morton completed the revision of the genus *Besleria* of the family Gesneriaceae begun several years ago. E. C. Leonard, assistant curator, is preparing several regional treatments of tropical American Acanthaceae. It is a satisfaction to report that the bibliography of eastern Asiatic botany by Dr. E. D. Merrill, of Harvard University, and E. H. Walker, of the National Herbarium, was issued in April 1938 by the Arnold Arboretum, bringing to completion a joint enterprise conducted for nine years under the auspices of the Smithsonian Institution, the New York Botanical Garden, and the Arnold Arboretum, with the assistance of several emergency relief agencies.

The number of specimens received with request for identification in some divisions runs into the thousands, as in the division of plants (17,366 specimens) and the division of marine invertebrates (about 9,100 specimens). The curator of insects received from the United States Bureau of Entomology and Plant Quarantine about 1,800 lots, of which less than 30 lots remain unidentified at the end of the year. Specifically, the number of lots with request for identification was as follows: Mammals, 47; birds, 27; reptiles and amphibians, 30; fishes, 43; insects, apart from the 1,800 mentioned above, 167; marine invertebrates, 119; mollusks, 119; helminths, 3; corals, 3; and plants, 267.

In all divisions volunteer specialists aided in the identification and study of the material. Though too numerous to list here, the work of these voluntary assistants is greatly appreciated, since it supplements in a very vital way the research activities of our own staff.

In one division alone (marine invertebrates) 73 separate shipments were made to these outside specialists during the year, comprising about 4,400 specimens.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions aggregated 2,827 specimens, and 17,535 specimens were sent out in exchange, of which 6,168 specimens were zoological. The 11,477 plants distributed went to 70 institutions and correspondents, of which 41 were in the United States and 29 in 17 other countries.

#### NUMBER OF SPECIMENS UNDER DEPARTMENT

The number of specimens given below is based on the numbers estimated for the previous fiscal year with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. Several collections, such as the corals, of which no estimate has as yet been made, are not included, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions, lots consisting of minute organisms are frequently counted as single specimens though they may contain hundreds or even thousands of individuals the enumeration of which could have no useful purpose. This practice, however, has not always been consistently adhered to.

Mammals	237, 113
Birds:	
Skins	265, 159
Alcoholics	9, 983
Skeletons	16, 189
Eggs	89, 984
	381, 315
Reptiles and amphibians	114, 058
Fishes	1, 162, 730
Insects	4, 846, 880
Marine invertebrates	975, 342
Mollusks	2, 752, 169
Helminths	145, 606
Echinoderms	165, 854
Plants	1, 720, 612
Total	12, 501, 679

## DEPARTMENT OF GEOLOGY

(R. S. BASSLER, *Head Curator*)

THE past year shows substantial progress throughout the department of geology, particularly in the care of the collections and in the acquisition of valuable material for study and exhibition through field work by members of the staff. The intelligent help furnished by the Federal relief organizations so forwarded the preparation and assembling of the study series in all divisions that an arrearage from several years past was cleared up. Completion of plans set forth a year ago also contributed to the progress noted. The staff is now in a position to proceed with the more advanced work of study and identification.

The paleontological series were enriched particularly through explorations for vertebrate fossils in the Upper Cretaceous and Early Tertiary rocks of Utah, and by the collecting of invertebrate fossils in Michigan, Pennsylvania, and New York. The increase in acquired meteorites, the second largest number recorded in any one year in our history, and the results of four months' search for minerals in Europe and Asia by Assistant Curator E. P. Henderson, are the outstanding accomplishments in mineralogy and petrology.

### ACCESSIONS

A total of 233 accessions comprising approximately 60,927 specimens was recorded for the year, distributed as follows: Mineralogy and petrology, 117 accessions (790 specimens), physical and chemical geology, 8 accessions (68 specimens), stratigraphic paleontology, 95 accessions (60,000 specimens), and vertebrate paleontology, 12 accessions (69 specimens).

*Mineralogy.*—In this division 65 choice specimens listed under 11 accessions were obtained through the Canfield Fund, notable among which are minerals purchased in Japan by E. P. Henderson, comprising very large, fine twin crystals of quartz, unusually good specimens of chalcopyrite, and a superb group of arsenopyrite crystals. Other minerals secured through this fund include such excellent exhibition material as a large clear platy crystal of the lead chlorocarbonate, phosgenite, from Sardinia; a slab of lustrous black garnet crystals from California; a huge doubly terminated Arkansas rock crystal; a rock slab with crystal rosettes of brilliant stibnite, and a group of the lead molybdate, wulfenite, from Rumania; several speci-

mens of emerald in schist from the ancient locality at Habachthal, Austria; groups of exceptionally handsome wulfenite crystals from Arizona; a group of large crystals of the rare silicate, ilvaite, from Greece; and amethyst crystals, including the variety known as scepter, from Montana.

Of the 23 accessions accredited to the Roebling Fund, 12, totaling 105 specimens, relate to minerals, the most interesting addition being seven American diamonds—one from Wedderburn, Oreg., one from Fig Indian Creek, Amador County, Calif., and five from Smith Flats, Eldorado County, Calif. Only a few authenticated American diamond localities are now unrepresented in the collection. Other minerals obtained through this fund are a large suite of variscite and other associated phosphate minerals from Fairfield, Utah; one of the finest of groups of the silver sulfantimonide, stephanite, ever found at the classical locality of Freiburg, Germany; a large assemblage of lustrous translucent cassiterite crystals from Araca, Bolivia; one of the largest crystals yet found of the rare scandium silicate, thortveitite, from Iveland, Norway; a suite of fine Rumanian minerals including pyrrhotite in various habits, marmatite, semseyite, fullopite, and others; several unusual fluorite clusters, including rare hexoctahedral crystals, from Bolsena, Italy; a nephrite boulder from the Fraser River, British Columbia; and a fine crystallized example of the rare copper selenate, chalcomenite, from Bolivia.

Minerals also worthy of special mention were acquired by gift or exchange, these embracing type and described specimens as well as other unusual material. Prof. T. Ito, Imperial University of Tokyo, contributed a series of rare Japanese minerals, among which are the new species teineiite, phosphate-silicate gel, and others. Charles R. Toothaker, Philadelphia Commercial Museum, sent a fine suite of chiolite and associated minerals collected by himself at Ivigtut, Greenland, and Hugh D. Miser, United States Geological Survey, continued his interest in the Museum's collections by the donation of a number of specimens from Magnet Cove, Ark., which included large crystals of vesuvianite, complete twin crystals of rutile and others. Dr. John P. Marble deposited in our collections several analyzed pitchblende samples from Canada, type specimens used in geological age determinations; Dr. Ralph E. Grim, Illinois State Geological Survey, presented a type specimen of the new clay mineral illite; and Dr. Duncan McConnell, University of Texas, a type specimen of the complex phosphate, ellestadite. Miss Jewell J. Glass, United States Geological Survey, deposited several studied specimens of the rare silicate, inesite.

Dr. Harvey P. Barret, Charlotte, N. C., again made several noteworthy contributions, chiefly rare uranium minerals from the district about Spruce Pine, N. C. Dr. Harald Björlykke, Geological

Institute of Trondhjem, sent a fine terminated crystal of thortveitite from Norway; Dr. Frederick Pough, American Museum of Natural History, a specimen of the rare beryllium mineral, bertrandite, from a new locality discovered by him at Bedford, N. Y. Other notable additions are: From C. A. Heberlein, Goldfield, Nev., the unusual molybdenum sulphate, ilsemannite; William H. Nissen, Petaluma, Calif., lawsonite from a new locality in Sonoma County; Prof. Patrick Marshall, Wellington, New Zealand, small but brilliant crystals of the amphibole riebeckite of unusual occurrence, arfvedsonite, and the rare new mineral tuhualite, in lava; Thomas G. Donovan, Wellesley, Mass., gold and pitchblende specimens from Canada; Prof. V. P. Gianella, Mackay School of Mines, unusual examples of richly rose-colored piedmontite from Nevada; and G. L. Sheldon, a slab of rock with hematite dendrites.

Specimens of the new species leightonite from Chile, aminoffite from Sweden; ferroschallerite from New Jersey, and the new borate mineral hilgardite from Texas were obtained by exchange from the Mineralogical Museum of Harvard University. Similarly, from the Champion Sillimanite Co., Laws, Calif., the new complex phosphate woodhousite, and the rare species augelite from a new locality; and from the University of Stockholm a series of pegmatite minerals including the new species varulite, manganvoelkerite, and ferrosicklerite. A large lot of miscellaneous minerals was obtained by exchange from the Karpinsky Museum, Moscow, U. S. S. R., and another of Scottish minerals from the Grant Institute of Geology at Edinburgh, Scotland.

A large number of specimens of the rare mica mineral, taeniolite, from Magnet Cove, Ark., collected by H. D. Miser, Dr. C. S. Ross, and Dr. W. T. Schaller for the Museum, were transferred by the United States Geological Survey.

Four cut gem stones were added to the Isaac Lea Collection through the Frances Lea Chamberlain Fund: A blue spinel from Ceylon, 30 carats; a rose-colored spinel from Ceylon, 22 carats; a green sapphire, 17 carats; and a yellow sphalerite, 48 carats, from Mexico. In addition, four iridescent obsidians from California were cut and polished for the exhibition series in the department laboratory.

The ore collections were enriched by several large exhibition specimens and various smaller examples for the study series. A large mass of potash ore from the important deposits at Mulhouse, Alsace, was presented by the American Potash Institute, and similar exhibition specimens with leonite, sylvite, and related minerals from Carlsbad, N. Mex., were transferred from the United States Geological Survey. C. E. Julihn, Washington, D. C., presented a rich specimen of silver ore with abundant partzite from Benton, Calif.

Frank L. Hess continued his interest of many years with gifts of uranium, vanadium, tungsten, and gold ores, as well as nonmetallics including spodumene, nephelite, and others, all important additions.

The petrological accessions of special note include a set of rocks illustrating the geology of the Baker, Oregon, quadrangle, transferred by the United States Geological Survey, and described by James Gilluly in publications of that organization; specimens of keilhauite-bearing granite from Rhode Island, presented and recently described by Prof. Esper S. Larsen, Harvard University; and a series of orthoclase-plagioclase granite pegmatite from the Queens Tunnel, New York City, the gift of T. G. Horesco, Freeport, N. Y.

Seventy meteorite specimens, with 62 falls new to the collection, were added during the year, the largest number by far since the acquisition of the Shepard Collection in 1915. Forty-one of these were obtained by exchange, twenty-one by purchase, and eight as gifts. From Stuart H. Perry, Adrian, Mich., came as gifts some of the most important individual specimens, namely, Athens, Ala., an almost complete stone of 223 grams; Andover, Maine, almost complete stone of 2,823 grams; San Francisco Mountain, Ariz., a fresh siderite of 1,445 grams; and Woods Mountain, N. C., an almost complete siderite of 1,752 grams. Prof. W. A. Tarr presented the Alva, Woodward County, Okla., stone of 47 kilograms. Dr. Euzebio de Oliveira, Servico Geologico e Mineralogico, Rio de Janeiro, donated a slice of the Cratheus iron, 42.5 grams, and H. H. Nininger, a slice weighing 202 grams, of the Coolidge, Kans., meteorite. Dr. Clay P. Butler, of the Smithsonian Observatory at Calama, Chile, continued his efforts in obtaining new falls, one of which, Puripica, 19 kilograms, was accessioned this year.

Outstanding meteorites added through the Roebling Fund are: Beenham, N. Mex., complete stone, 5 kilograms; Johnson City, Kans., complete stone, 2 kilograms; Plantersville, Tex., complete stone, 2 kilograms; Santa Luzia, Brazil, complete siderite, 18 kilograms; one-half of the Shaw amphotericite, 1,730 grams; Rolla, Kans., complete stone, 433 grams. An interesting series including meteorites and rocks illustrating the geology of the Oesel meteoric craters of Estonia were received in exchange from I. Reinvald, of Talinn, Estonia.

Additions to the division of physical and chemical geology included a long exhibition specimen of flexible sandstone from North Carolina, presented by the Queensboro Council of the Boy Scouts of that State; material collected for the Museum in Alaska by Dr. Aleš Hrdlička during the summer of 1937; an exhibition specimen of Devonian brown sandstone with calcite-filled gash veins, from central Maine; of especial interest for the exhibition series, two framed pictures of the volcanoes Fujiyama and Aso, presented by Reitetsu Iwata, of

the Japanese Embassy; and two large photographs and two transparencies of Luray Caverns, gift of the Luray Caverns Corporation.

*Vertebrate paleontology*.—The material resulting from the field expedition in vertebrate paleontology under C. W. Gilmore is of first importance, benefiting both the mammalian and reptilian collections, but more especially the latter. Specimens worthy of special mention are, about one-third of the skeleton of a very large sauropod dinosaur, a representative of the family Titanosauridae, the first to be found in North America; a disarticulated skull and parts of the skeleton of a horned dinosaur; and six skeletons, two of which are partially articulated, of a new genus and species of the Sauria. These latter specimens so supplement one another that a complete restoration of the animal can be made. Fifteen mammalian specimens sufficient to indicate their age furnished the first recognition of the Paleocene in Utah. From the Triassic of Arizona three phytosaurian and two amphibian skulls were secured by the expedition. In addition to these are many less complete specimens of considerable scientific interest.

Through participation in the Dallas Exposition, the division benefited greatly by important specimens and illustrative materials presented by the United States Texas Centennial Commission. The more important of these were a skeleton of the flightless Eocene bird *Diatryma* from Wyoming; a unique specimen of the lizard *Glyptosaurus giganteus*, having the dermal armor of the neck preserved *in situ*; a nearly complete articulated tail of the dinosaur *Camarasaurus latus* from Utah; the pelvis, hind limbs, and tail with skin impressions of a crested hadrosaurian dinosaur from Alberta, Canada. Especially desirable was a diorama illustrating the fauna and flora of the Jurassic geological period, and two canvases (8 by 15 feet), one a restoration of the sauropod dinosaur *Camarasaurus* painted by R. Bruce Horsfall, and the other a restoration of *Dimetrodon* and other Permian animals painted by Garnet Jex.

A skull of the ungulate *Merycoidodon gracilis* of much historical interest, having originally belonged to the Evan's collection, was secured through exchange with Columbia University. The type specimen of the dog *Tomarctus marylandica* from the Miocene rocks of Maryland was presented by Dr. Charles T. Berry. A tarsometatarsus of *Nesotrochus debooyi*, an extinct bird from Puerto Rico, was the gift of the Peabody Museum of Natural History of Yale University.

The collection of fossil footprints was enriched by three slabs of dinosaur tracks from Adams County, Pa., presented by the Highway Engineering and Construction Co., of Gettysburg.

*Stratigraphic paleontology*.—Again the important accessions of fossil invertebrates in the division of stratigraphic paleontology came

through efforts of the staff. The most extensive and valuable accession for the year is the collection made by Dr. G. Arthur Cooper and Preston E. Cloud from the Devonian of the Lower Peninsula of Michigan, giving the Museum an excellent series from these rocks, which cannot be duplicated. The next most important of the collections made for the Museum was secured in the Chazyan rocks of northeastern New York and Quebec by Dr. Cooper and Dr. Josiah Bridge, of the United States Geological Survey.

Assistant Curator Cooper was also instrumental in securing various accessions, most noteworthy of which are additions to the brachiopod collection. Thus rare brachiopods from the Canadian Period came as a gift from the National Museum of Canada; the University of Birmingham, England, exchanged other specimens, and a fine set of European Carboniferous and Mesozoic brachiopods was received in exchange from Harvard University.

L. L. Sloss contributed new species of Devonian corals from Michigan, while C. R. Peregrine, of the Thunder Bay Quarries Company of that State, donated fine Devonian crinoids. John Hidore presented Upper Devonian invertebrates from Iowa, and Dr. C. P. Butler gave an excellent collection of Jurassic fossils from Chile. A large collection of brachiopods from the Upper Pogonip formation of Nevada from John N. Mason, Princeton University, Devonian invertebrate fossils from the Island of Novaya Zemlya collected personally by Dr. Julia A. Gardner, of the United States Geological Survey, and an extensive set of well-preserved fossil invertebrates from the Coal Measures of Kansas, from A. M. Brooks of Pittsburg, Kans., were important gifts to the Paleozoic series. The echinoderm collections were enriched by an extensive set of echinoids from the Comanchean of Texas from Mrs. J. H. Renfro, a series of entire crinoids from the Coal Measures of Oklahoma from H. L. Strimple, and a rare Devonian crinoid from Michigan from Chaplain John Samuel.

Transfers from the United States Geological Survey included collections of Ozarkian, Canadian, and Chazyan brachiopods, numbering more than 22,000 specimens.

In the section of Cenozoic invertebrates the most important accession received for many years is that of the loess collection of shells forming a part of the Bohumil Shimek series of recent and fossil shells, which was purchased from Prof. Shimek's heirs. This is the finest assemblage of its kind that has ever been brought together, but as the Eocene formation borders so closely on present time the collection is considered as a unit, and the large number of specimens received is included in the report for the department of biology. Type specimens of land and fresh-water mollusks from the Oligocene of Colorado were received from J. Harlan Johnson as a gift, while types of Tertiary Foraminifera were presented by Dr. T. Wayland Vaughan.

Other important additions to the Cenozoic collection were gifts from Carl J. Bleifus, of Hollister, Calif., of barnacles, crabs, and other fossil invertebrates from that State. An important transfer by the United States Geological Survey consisted of Pleistocene marine shells from Guam, while another series of shells of this age from Chazy, N. Y., was collected by Drs. Josiah Bridge and G. A. Cooper. O. H. Betombeau, of London, presented important material from the Tertiary Bartonian formation of England.

Accessions in paleobotany were, as usual, few, but three of them, all transfers from the United States Geological Survey, are especially important in that they contain many type specimens. These fossil plants, described by Dr. R. W. Brown, are all of Mesozoic and Cenozoic age and were derived from the Southern and Western States and Alaska. An important accession of Paleozoic plants from the Cherokee shales of Missouri was received from Joe Harner. To the exhibition series was added a polished slab of fossil wood exhibiting the processes of decay previous to petrification, gift of Carl Herrin, of Portland, Oreg.

#### INSTALLATION AND PRESERVATION OF COLLECTIONS

Exhibition work in the divisions of mineralogy, petrology, and physical geology, under the supervision of Curator W. F. Foshag, was concentrated first on the relabeling with additional information of interest to the general public of all the minerals in the large upright cases, more than 1,000 labels being completed. An upright case to exhibit gypsum crystals from the caves at Naica, Mexico, collected several years ago, was installed and, as new material illustrating the various forms of calcium carbonate had been secured, this exhibit was rearranged.

The exhibit of meteorites was remodeled, and small, inconspicuous fragments were removed to the study series. All the larger sliced specimens were repolished and re-etched by B. O. Reberholt, using the new etching technique developed by him in our laboratory. The first case of meteorites is concerned with their general form and characteristics and shows their appearance both in fresh and weathered condition. Then, three cases exhibit specimens systematically arranged according to classification, and, finally, one case is devoted to meteor craters. The exhibits relating to hot and cold springs, Yellowstone National Park, vulcanism, and caves were remodeled, and the several outdoor geological exhibits near the Adams Mill Road and Harvard Street entrances to the National Zoological Park were cleaned and improved.

In the preservation of collections, fair progress was made by Assistant Curator E. P. Henderson on the consolidation into one large series in room 314 of the various mineral collections. This consolidation has

two main objects: To simplify the use and study of the collections and to gather into better quarters a considerable quantity of valuable material. This consolidation necessitated a number of involved preliminary shifts. First, the extensive Yellowstone Park hot springs material was sorted and condensed; the large series of heavy sands was placed in more suitable containers and consolidated; the huge collections relating to the building stone resources of the Eastern United States made by T. Nelson Dale were rearranged; and a very large set of Florida phosphate ores was trimmed and condensed. The nonmetallic ores were then shifted to their corresponding position under the exhibition cases; the described geological sets were transferred to the space gained by the previous condensations and the metallic ores moved to replace the mineral collections in the corridor. The total involved in these reallocations was 1,386 standard drawers. This consolidation of the mineral collections is now completed through the native elements and the sulphides and the sulpho-salts.

The Iddings collection of South Sea Island rocks of more than 5,000 specimens, long in storage, was sorted, numbered, and cataloged and the duplicate material prepared for exchange.

In the rock-cutting laboratory, besides the cutting, polishing, and etching of meteorite slices mentioned before (260 in all), 1,622 mineral and rock samples were cut, polished, or trimmed, and 220 thin and polished sections of rocks, minerals, ores, and fossils were prepared.

As a project of the W. P. A., the meteorite check list is being expanded to include important bibliography, distribution of material in collections, and other data for a comprehensive annotated catalog.

Dr. C. E. Resser, curator of stratigraphic paleontology, with the aid of several Federal relief workers skilled in preparatory and other Museum duties, brought the preparation of the Cambrian collections to such a point that only a small amount of totally unworked material remains. Because of the great size of this series, the lifetime work of Dr. Charles D. Walcott, several more years of study will be required before the material can be considered in permanent Museum form. Cambrian collections from the northern Wasatch Mountains and from Oklahoma and Texas were also prepared and studied, and the work of rechecking the many Walcott brachiopod types, bringing their labels up to date, was continued actively. The large cephalopod series long under study by Dr. E. O. Ulrich and the late Dr. August F. Foerste was overhauled, cleaned, and rearranged, and all borrowed material was returned to the owners.

Dr. E. O. Ulrich, associate in stratigraphic paleontology, as usual contributed his services and spent the entire year in field and research work, thus increasing the value of the collections. This year he con-

centrated on the Lower Paleozoic formations of Colorado and the Canadian and Ordovician rocks of the Appalachian Valley.

Dr. G. A. Cooper, assistant curator, divided his time in the office in the preparation of Devonian fossils received in recent years from Michigan and New York, and in adding to the brachiopod series by the identification and introduction of new material, amounting to 160 drawers. He also completely revised the exhibition series of Devonian invertebrate fossils, substituting vehisote blocks with a softer tone for the old-time clay tablets. As a result of his special technique of etching silicified fossils from limestone blocks with hydrochloric acid, he has mounted and added many thousands of brachiopods and trilobites to the study series. The fragile nature of these fossils and the great delicacy of their preservation require that they be very specially mounted in glass-topped boxes, a time-consuming procedure.

With the aid of several National Youth Association students and help from the Works Progress Administration, the head curator, Dr. R. S. Bassler, contributed to the work of the division as follows: He completed the separation and final review of all Cretaceous and Early Tertiary Bryozoa, eliminating the duplicates for exchanges. About 700 photographs of European Cretaceous Bryozoa were prepared and sent to the leading European authority, Ehrhard Voigt, of the University of Halle, Germany, for identification. By the end of the year two-thirds of these had been returned and the species, properly identified, added to the collection. Dr. Bassler also continued the preparation of the large conodont series, reducing it by trimming away superfluous rock to a space about one-fifth its former extent. The Teller stratigraphic collection of Silurian fossils was prepared and placed in form for final investigation. In the exhibition series material for two cases was assembled to illustrate the structure of Mississippian plants. In other divisions further work included another set of stereomotorgraph slides, this time to illustrate weathering as a geologic process, and the installation of three new cases in physical geology, one devoted to an exhibit of pebbles showing the part they play in geologic history, another to the illustration of the preparation and meaning of topographic and geologic maps and models of geologic structure, and the third an exposition of the work done in the laboratories of the department.

The cataloging of all material received during the year was completed, this representing 2,269 entries and 1,791 types; 497 entries in paleobotany included 833 type specimens.

During the seven months of the year in which Miss Margaret Moodey was employed in work relating to the Springer collection of fossil echinoderms, she was engaged chiefly with matters relative to

the preparation and publication of a synoptic list of Paleozoic pelmatozoan genera, reading both galley and page proofs. At the close of the year this work (Pt. 83, *Fossilium Catalogus*) was in final page proof. Cataloging of new material for the collection, bibliographic work, and the preparation of faunal lists of Paleozoic echinoderms occupied her attention the rest of the time.

Dr. Edwin Kirk in the course of his generic studies of the Inadunata, Paleozoic crinoids abundantly represented in the Springer collection, has prepared and identified a number of Mississippian species, which have been incorporated in the study series.

Dr. Mary J. Rathbun, associate in zoology, continued her care of the fossil crab collection and aided the department with her identifications.

Dr. Paul Bartsch, curator of Cenozoic invertebrates, reports the completion of the labeling and cataloging of the Shimek collection of loess shells as the outstanding work of the year.

The paleobotanical study series was much improved during the year with the assistance of Drs. R. W. Brown and C. B. Read. With the transfer from Johns Hopkins University of the many type and other specimens of Mesozoic and Cenozoic plants assembled there by Prof. Edward Berry, practically all the loaned material of fossil plants has been returned to the Museum. These particular specimens were checked by Dr. Brown and the entire collection placed in permanent form. Similarly, Dr. Read was engaged on work covering a portion of the LaCoe collection of Paleozoic plants.

Dr. Lloyd G. Henbest continued to care for the Foraminifera and was able to mount many of the specimens in permanent form. New cases that have been ordered will enable a still safer and more satisfactory arrangement of these microscopic organisms. The larger Foraminifera continued in the care of the specialist on the subject, Dr. T. Wayland Vaughan.

Dr. Charles Butts, in continuation of his field work for Georgia and Virginia on the geologic mapping of these States, added much paleontological material to our collections. In the laboratory he was as heretofore engaged in the identification of the Paleozoic faunas concerned with his studies.

The exhibition series of vertebrate fossils, under the supervision of Curator C. W. Gilmore, was increased by the addition of a mounted skeleton of *Plesippus shoshonensis* prepared by Thomas J. Horne. Eventually this skeleton with others will be mounted in a group illustrating the sex and growth stages of this extinct Pliocene horse.

A diorama illustrating the plant and animal life of the Jurassic geological period was installed in the main exhibition hall, where, likewise, the large painted restorations of *Camarasaurus* and *Dimetrodon* were hung in suitable spaces on the walls. These illustrative

exhibits fill a long felt want as they do much to brighten, as well as to explain pictorially, the exhibits of vertebrate fossils.

Assistant Curator C. L. Gazin prepared a special case with representatives of fossil skulls and jaws of many of the orders of mammals, arranged for ready comparison by the student. He also rearranged and added various specimens to the case devoted to the display of Cumberland Cave fossils, which, as a result, presents a much improved appearance. For the study series he completed the identification and cataloging of the 1936 and 1937 collections of Paleocene mammals from New Mexico and Utah. The collection of Fort Union Paleocene mammals, comprising more than 800 specimens from Montana, recently returned from the American Museum of Natural History, was assorted and arranged.

Norman H. Boss completed the preparation of all the delicate lizard materials collected this past season, as well as much of the tail of the large sauropod. Since completing the *Plesippus* skeleton, Thomas J. Horne has been almost entirely engaged in the preparation of the bones of the sauropod dinosaur secured the past season.

Through W. P. A. assistance the preparation of Oligocene fossils of the 1932 collection continued, and the cataloging, patching, and numbering of specimens proceeded so well that this part of the work may now be reported as practically current.

It can again be stated that the vertebrate collections, both study and exhibition, are in the best ordered condition since the establishment of the division.

#### INVESTIGATION AND RESEARCH

Dr. R. S. Bassler, head curator, completed Part 83 of the *Fossilium Catalogus*, entitled "A Bibliographic Index of Paleozoic Pelmatozoan Genera." He was also engaged in the preparation of faunal lists for another volume on the same subject and continued work on a volume dealing with fossil Bryozoa, which is to form a part of a paleontological series now in course of printing in Germany. Assistance in outlining scripts for two radio broadcasts, the preparation of talks to teacher groups and other organizations, and similar duties occupied considerable time, but all spare moments were devoted to the continuation of studies on Silurian corals and Paleozoic crinoids.

Dr. W. F. Foshag, curator of mineralogy, completed an investigation of the Shallowater meteorite and began a study of the new Shaw meteorite. Many evenings were spent on a section devoted to the ore deposits of Mexico, to be included in the "Geology of North America," a volume of the series "Geologie der Erde."

With 4 months in the field, and much accumulated routine to engage his attention, E. P. Henderson, assistant curator of physical and chemi-

cal geology, found opportunity to make only brief laboratory investigations.

Curator Charles E. Resser, of the division of stratigraphic paleontology, completed and read proof on his paper on the Cambrian of the southern Appalachians. Proof of the monograph on Manchukuo, with Dr. R. Endo, was read, but publication awaits the opening of the new Science Museum at Mukden. The paper on the Cambrian of eastern Asia was completed early in the year.

Assistant Curator G. A. Cooper began the study of the Chazyan brachiopods. Work was started on this project in 1937, when Preston E. Cloud prepared most of the specimens and made about 1,400 photographs. This help was made possible through a grant from the Geological Society of America, which was exhausted in September 1937. In January 1938 the assistant curator started preparation of the manuscript and now has the orthoid brachiopods and the inarticulates almost completed. This amounts to about 100 species in about 35 genera.

The assistant curator and P. E. Cloud prepared and presented for publication in the *Journal of Paleontology* a short paper on a new Devonian fauna discovered in Calhoun County, Ill.

Work on the Michigan Brachiopoda has not progressed beyond the stage of preparation and photography of the specimens. To date about 200 specimens, future types, have been prepared and photographed.

Dr. E. O. Ulrich prepared correlation charts to go with the monograph on Canadian brachiopods now in press.

C. W. Gilmore, curator of vertebrate paleontology, finished a manuscript, "On Ceratopsian Dinosaurs from the Two Medicine Formation, Upper Cretaceous of Montana." Much of the manuscript has been written and illustrations prepared for a detailed osteological description of a new genus and species of lizard from Utah. Some manuscript has been added to that already compiled for a history of the division of vertebrate paleontology. Progress may also be reported on a paper describing an Upper Cretaceous sauropod specimen collected by the 1937 paleontological expedition.

Assistant Curator C. Lewis Gazin prepared a short manuscript descriptive of the new Paleocene mammals collected by the 1937 expedition in central Utah. He also prepared a manuscript on "Fossil Peccary Remains from the Upper Pliocene of Idaho." A brief study was made of a musk-ox skull sent to the National Museum from Indiana, on which a report will be published during the year. Progress is also reported by the assistant curator on the study of Upper Pliocene and Pleistocene mammalian fossils from the San Pedro Valley in Arizona.

Dr. Remington Kellogg continued his studies of fossil cetaceans, devoting special attention to the Cetotheriidae, of which a monographic revision is planned.

Dr. Alexander Wetmore continued his study of fossil birds, publishing several short papers on that subject.

As usual, various members of the U. S. Geological Survey staff with offices in the Museum building were engaged in study of the collections. In the section of paleobotany, Dr. R. W. Brown nearly completed the study of the Fort Union floras. Dr. C. B. Read completed the manuscript begun by the late Dr. David White describing the Lower Pennsylvanian floras of Illinois. In invertebrate paleontology, Dr. L. W. Stephenson and Dr. J. B. Reeside continued their researches on Cretaceous paleontology, the former completing his description of the Navarro group of Texas. Dr. W. C. Mansfield was occupied with the Cenozoic faunas and completed several papers on the Tertiary invertebrate fossils of Florida. Dr. Julia Gardner finished her work on the molluscan fauna of the Alum Bluff group of Florida, while F. Stearns MacNeil used the Museum collections in his study of the pelecypod genus *Trinacria*. Dr. Josiah Bridge redescribed the Roemer Paleozoic types from Texas and deposited a set of the casts in the collections. Dr. Charles Butts continued with his study of the geology of Georgia and made progress with description of Paleozoic fossils of that State.

The identification of materials sent here for examination and report demands a great deal of time. Within the year 725 lots were received, distributed as follows:

Mineralogy, geology, and petrology-----	557
Stratigraphic paleontology-----	124
Vertebrate paleontology-----	44

As stated in previous reports, specimens brought to the department by individuals and receiving immediate attention, as well as letters asking for information, are not included here, and usually no record of them is kept.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distribution of geological specimens was as follows: Gifts, 1,683 specimens; exchanges, 3,528 specimens; loans for study, 398 specimens.

#### NUMBER OF SPECIMENS UNDER DEPARTMENT

The estimated total of specimens in the department is as follows:

Mineralogy and petrology-----	148,860
Geology, systematic and applied-----	96,885
Stratigraphic paleontology-----	2,249,175
Vertebrate paleontology-----	28,771
Total-----	2,523,691

## DEPARTMENT OF ARTS AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

PROGRESS in the dual work of preserving and increasing the collections of the department of arts and industries has brought improvement in the condition of existing collections in the year that has passed, but there was a material falling off in number of new accessions. It is believed, however, that with improvement in the economic situation, both public and industrial cooperation will become less restricted and that a more normal balance of activities within the department will result.

During the year three international expositions in which the Smithsonian Institution participated were brought to a close, and the head curator terminated his temporary duties as contact officer for the Smithsonian Institution in these activities. At this writing he is serving as co-chairman of the committee of Federal representatives appointed to develop the exhibit theme "Education, Art, and Recreation" for the New York World's Fair 1939, and is also representing the Smithsonian Institution in matters pertaining to Federal exhibits for the Golden Gate International Exposition, San Francisco, 1939.

Frank A. Taylor, curator of engineering, continued as associate director of the W. P. A. project on the Historic American Merchant Marine Survey until its termination in October 1937. Since then he has served as consultant to the Florida Merchant Marine Survey and to the Historic Marine Survey of California. These are continuing State projects patterned after the original Federal W. P. A. project.

During the year the department had the assistance of 11 Works Progress Administration workers assigned to the various divisions and sections. With this help much was accomplished in clearing up arrearages in arrangement of stored and study collections, as well as in cataloging, labeling, installing exhibited collections, and other curatorial matters.

On March 1, 1938, C. Allen Sherwin, scientific aide, division of graphic arts, resigned, and on March 31, 1938, the services of Miss Aida M. Doyle, aide, section of organic chemistry, terminated through retirement. The vacant position of preparator in the division of engineering was filled on October 16, 1937, by the appointment of Kenneth M. Perry.

## ACCESSIONS

The number of accessions—193—was 44 less than that for last year. The number of specimens cataloged was 2,326, which were distributed among the various divisions and sections as follows: Engineering, 249; textiles, 222; organic chemistry, 28; wood technology, 748; medicine, 514; foods, 2; agricultural history, 2; graphic arts, including photography, 561.

*Engineering.*—Of the 56 accessions received, 33 (including 106 specimens) pertain to mechanical technology; 22 (111 specimens) to aeronautics; and 1 (32 specimens) to mineral technology.

The transportation sections were the largest benefactors of new material, the section of aeronautics alone receiving about 38 percent of the new accessions, which consisted mainly of models of modern and early aircraft. The following models are noteworthy: The Vickers Vimy airplane, which made the first nonstop flight across the Atlantic in 1919, presented by Vickers (Aviation), Ltd., and Rolls-Royce, Ltd., London; the Sikorsky *S-40*, the first of the clipper planes in service on airways over Florida, the West Indies, and South America, a gift of Pan American Airways, New York; and the Wilford gyro, presented by the Pennsylvania Aircraft Syndicate. Phillips & Powis Aircraft, Ltd., Berks, England, presented a model of the low-wing tractor monoplane *Mohawk*, the original of which was made to the order of Col. Charles A. Lindbergh and is now being used by him. Several of the models received are of planes employed in the airmail service of the United States. Among them are: The *Queen Bleriot* monoplane, the first airplane to fly mail in America, piloted by Earle Ovington on Long Island in the fall of 1911, gift of J. Edward Reeves; the Curtiss modified "R" used by Victor Carlstrom in the New York Times sponsored mail flight from Chicago to New York, November 1916, presented by the New York Times; and the Northrop airplane, the 1934 record holder for transcontinental mail transport, presented by Jack Fry, president of the Transcontinental & Western Air, Inc., who piloted the plane between Los Angeles, Calif., and Newark, N. J., in the remarkable time of 11½ hours.

A full-sized cable car of 1889 was added to the landcraft collection, with sufficient equipment to reproduce the underground conduit and cable. The car, which acquired its motion by mechanically grasping a cable driven from a central winding station, was the first to operate in Seattle, Wash., and was preserved and presented by the City of Seattle Department of Public Works.

Automotive accessions include the gold medal awarded the Duryea Motor Wagon Co., of Springfield, Mass., for the "punctual arrival" of its cars at Brighton, England, in the first Motor Car Club Tour,

London to Brighton, in 1896. This was preserved and presented by Mrs. David A. Reed, whose husband was an official of the original company.

Original builders' models of watercraft received during the year include that of the schooner *Daniel S. Williams, Jr.*, 1877, presented by the American Car & Foundry Co., owner of the old Jackson and Sharp Shipyard at Wilmington, Del. Models collected and forwarded by the Florida Merchant Marine Survey included a pilot sloop of 1898, and the sloop yacht *Eclipse*, from the yard of Capt. Bat Fogerty, shipbuilder, Bradenton, Fla.; a sponge vessel of the Greek type from A. Kaminis, Tarpon Springs, Fla.; the sponge sloop *Emily*, from E. P. Macrenaris, Tarpon Springs, Fla., and the stern wheel river steamer *Uneeda*, from Capt. H. Hansen, Fort Myers, Fla. Ralph E. Cropley made two portraiture models of steamships, one of the *Leviathan*, which was presented to the National Museum by President Franklin D. Roosevelt, and one of the *Carinthia*, presented by Fred J. Owen. Mr. Cropley also assembled nine volumes of scrap-book material on the history of sailing vessels, which were presented by Mrs. Edith K. Roosevelt and Fred J. Owen. The data included make a highly valuable historical record and form an important addition to our files on this subject.

Three pieces of old telegraph apparatus of kinds not previously represented in the collection were obtained from the Western Union Telegraph Co. They are a Milliken repeater relay, used to repeat signals automatically from one section of long line to the next, introduced in 1864 and used to about 1880; a Varley artificial slide resistance, used before 1890 to balance electrically ocean telegraph cables; and a Rowland polar relay of about 1905, used with the Rowland Automatic Telegraph System. B. L. Dolbear, son of Amos E. Dolbear, professor of physics at Tufts College, and an active inventor in the early days of the telephone, presented six pieces of telephone apparatus of his father's design, including a complete static telephone wall set and several receivers.

A complete new operating exhibit of the automatic telephone exchange was presented and installed by the American Automatic Electric Sales Co. A novel feature of the equipment included is the use of transparent enclosures of the hand phones and phone boxes, which reveal coils, switches, and wiring not visible in standard equipment. The National Broadcasting Co. presented a series of 10 original radio microphones and models of microphones illustrating the development of the microphone. The series includes a carbon telephone transmitter, which was in use by wireless telephone experimenters about 1916; and several improved forms of the carbon microphone. One of the prized instruments of the group is the so-called

"tomato can" microphone used in the radio broadcast from the Westinghouse Station KDKA, Pittsburgh, November 2, 1920, said to have been the first announced radio broadcast.

In the section of metrology, W. H. Samelius, of Elgin Watchmakers' College, presented a dial gauge and an adjustable plier of curious pattern to add to the many old clock and watchmakers' tools previously given by him. The New Haven Clock Co. presented several clocks to maintain the small section of modern domestic time-keepers up to date. A. J. Levin donated the inventors' model of an adding and subtracting machine constructed about 1900 by his father, Judah L. Levin, who was the recipient of several patents for ingenious calculating machines.

Miscellaneous accessions include a nicely preserved Frost Maker refrigerating machine, presented by W. W. Stuart, who gave also an early ice tray and ice-tray compartments. John D. Motsinger presented an old desk fan driven by a small hot-air engine heated by the flame of an alcohol burner. It is a well-made forerunner of the electric fan.

The section of tools and crafts received a well-executed specimen of a wiped lead-pipe joint with a wiping pad and description of the operation from the maker and donor, George Middleton. It is preserved as an example of a passing art. D. P. Curtis presented several picks for dressing gristmill stones and a wrought-iron dog or hook for holding logs to the carriage of an old water-driven, up-and-down saw mill, and C. M. Himmelheber donated a pair of pipe tongs, which preceded the pipe wrench for holding and turning pipe.

To the collections in mineral technology, the New Jersey Zinc Co. added examples of raw material, ingots, and finished products illustrative of modern zinc products and fabrication.

*Textiles, organic chemistry, wood technology, and medicine.*—The 1,487 specimens added to the collections in these divisions and sections were contained in 74 accessions, 2 of which were joint accessions with other departments. Approximately one-half of the specimens were samples of woods.

The collections of early American homecraft textiles and needle-work were considerably enhanced by gifts and loans, totaling 8 coverlets, 6 quilts, a linen tablecloth, 38 specimens of fine needlework, and 8 specimens of hair work. Among these were: A cotton patchwork and applique quilt, "The Star of Bethlehem," made in 1810, presented by Mrs. Marvel Mildred Matthes, West Brighton, N. Y.; an "album" or "autograph" quilt, made in 1849, a gift of Mrs. Laura Calder Stonebraker, Hyattsville, Md.; a blue-and-white, double-weave, Jacquard coverlet, "Lady's Fancy," woven in 1834, presented by Mrs. Harriet Ross, Nantucket Island, Mass.; a pictorial sampler worked in

colored worsted cross-stitch on cotton canvas in 1840, donated by Mrs. Laura J. Wasser, Kings Park, N. Y.; and 32 specimens, including needlework, framework, stitchery tools, scarf, and ribbons, presented by Mrs. Caroline Wolfley Shannon, Chevy Chase, Md.

Accessions to the general textile collections and worthy of note were as follows: The Cotton-Textile Institute, New York City, and the Celanese Corporation of America, New York City, continued their valued cooperation of former years by contributing specimens of present-day dress material illustrating new patterns and finishes. Mrs. Elsie McDougall, Woodstock, N. Y., contributed a series of specimens, collected by her in Mexico, illustrating some of the textile arts of the native Indians in Oaxaca, including a specimen of the parchmentlike silk nest of the gregarious butterfly *Eucheira socialis* (Westwood). The Commercial Museum, Philadelphia, Pa., presented a specimen of another source of wild silk, a nest spun by the gregarious larvae of a moth, *Eutachyptera psidii* Sallé, from Vera Cruz, Mexico; and Miss Helen M. Bradley, Bridgeport, Conn., donated a small collection that includes a skein of silk reeled, twisted, and prepared by Abigail Sherwood from silk cocoons raised by her in 1834; a dress made by her from material woven in England using her silk; and a bill showing the cost of spinning, weaving, and printing the dress material.

Two interesting accessions received and assigned to the section of agricultural history were the following: The original working model and the patented mechanical hand-power milking machine, "Cow Milker," patented December 20, 1892 (U. S. Patent No. 488282), presented by Mrs. Bessie D. Mehring, Keymar, Md., wife of the inventor, William M. Mehring; a hand-made, drum-type cotton planter, made prior to 1900, presented by Ruben F. Vaughan, Honea Path, S. C.

Three of the accessions assigned to the section of wood technology are noteworthy. One comprises 478 study samples of Peruvian woods from the Field Museum of Natural History, collected with botanical material by Llewelyn Williams of that institution. Another consists of 107 samples of commercial woods of the United States from the New York State College of Forestry, backed by herbarium material, a set of which is deposited in our National Herbarium. A third is made up of 141 wood samples of native and introduced trees of Florida received from Milton Scott, Miami, Fla., and backed by plant material in the Buswell Herbarium, University of Miami.

An outstanding accession in the division of medicine was a collection of 220 specimens of pharmaceutical preparations to illustrate some of the best-known therapeutic classes of medicines. Among the specimens of particular interest are the diagnostic agents of biological derivation used in the laboratory diagnosis of tubercular in-

fections, the several types of pneumonia, syphilis, diphtheria, and typhoid fever. The collection was presented by Parke, Davis & Co., Detroit, Mich.

To the section devoted to the history of medicine was added a series of 105 photographic prints of masterpieces of art, dating from 2830 B. C. to the present, tracing the use of the staff, the crutch, and other appliances. This collection was developed by Dr. Sigmund Epstein, New York City, who presented the set of prints mentioned. Other donations to the section were: A pocket dental case, five instruments, and a lancet from B. F. Arthur, Winchester, Va.; a complete spring lancet with case, from Fred G. Orsinger, Washington, D. C.; two framed copies of the diploma of Dr. W. T. G. Morton, from Morton Otis; and six photographs relating to the history of medicine, from Dr. Walter C. Alvarez, Rochester, Minn.

The public-health collections of the division were enhanced by the gift of 33 posters concerning dangerous patent medicines, quackery, and infant welfare, from the American Medical Association, Chicago, Ill.; 3 strip films donated by the Society for Visual Education, Chicago, Ill., and 1 film dealing with "Bacterial Endocarditis and Valvular Disease," presented by the American Heart Association, New York City. These films are used to supplement the public-health exhibits.

*Graphic Arts.*—During the year a total of 63 accessions and 561 specimens were recorded in the division of graphic arts. Of these, 30 accessions and 377 specimens were assigned to the graphic arts section and 33 accessions and 184 specimens to the section of photography.

Two noteworthy accessions in graphic arts were obtained through transfer from other Federal departments. The larger of these in point of number of specimens consisted of 8 exhibition cases and 321 specimens received from the Government Printing Office. The most important single item was a Washington hand press manufactured by R. Hoe & Co., while the other 320 specimens consisted of several series—bookbinding, photoengraving in line and halftone, electrotyping, and other processes used in the making of books.

The second accession was received from the Bureau of Engraving and Printing, Treasury Department, to improve the exhibit of bank-note engraving and consisted of several steps in the making of an Alto Roll for a banknote. Two engraved plates and two individual altos were supplied, although to make a complete individual bank-note at least four altos are needed.

In addition to these specimens, a number of etchings, prints, and engravings were received as gifts yielding excellent examples of the

work of Alto Bacher, Joseph Margulies, Thomas Handforth, Charles B. Keller, and Thomas W. Nason.

In the field of printing, two excellent examples of silk stencil work were contributed by Leo H. Fuller, Inc., and the Lakeside Press presented a fine color reproduction of an old print made by the rubber offset process. There was received, too, from Thomas J. Shannon, a very elaborate valentine in the original envelope in which it was mailed in Circleville, Ohio. It is without stamps, simply marked "Paid," indicating its age as prior to 1856 for all local post offices did not require stamps on "drop" mail until after that date.

Of the 33 accessions in the section of photography the following are noteworthy: A modified Walcott camera made about 1840 by Henry Fitz, Jr., and presented by Henry G. Fitz, Peconic, Long Island, N. Y. This type of camera was invented by A. C. Walcott, May 8, 1840, to give a nonreversed image. (The Patent Office model is in the collections of photography.) The Fitz modification of the Walcott camera produces a right-handed image. Many early daguerreotypes were also included in the accession, one of which, a portrait of Henry Fitz, Jr., at the age of 29, taken in 1839, is claimed by the donor to be the first daguerreotype portrait ever taken. A camera obscura, which is said to have belonged to Thomas Jefferson, is another historically and photographically interesting specimen received during the year. It was lent by Mrs. H. N. Randolph, Charlottesville, Va., who also lent a revolving drawing table supposedly from the same source.

Through the interested efforts of Frederick Gooch, Washington, D. C., several important specimens of historical motion picture projectors were added to the collections. There was included a Powers Cameragraph head, No. 5, 1904; a Motiograph motion picture head, model No. 1, 1908, and an Edison Kinetoscope motion-picture projector head of 1908. In addition to these early types, Alton J. Pratt presented a Pathé motion-picture projector head, and the Motion-Picture Machine Operators' Protective Union No. 224, Washington, D. C., presented the Simplex motion-picture projector of 1919 that Douglas Fairbanks gave to President Woodrow Wilson for use in the White House during his illness.

The collection of pictorial prints numbers over 350 specimens and represented in it are examples of the work of the most notable artistic photographers of the world. To this collection were added 20 pictorial photographs during the year. Included are examples of the work of H. E. West, Arlington, Va.; Dr. J. B. Pardoe, Bound Brook, N. J.; Edward Alenius, Basking Ridge, N. J.; and the late Nickolas Boris, Cleveland, Ohio.

## INSTALLATION AND PRESERVATION OF COLLECTIONS

*Engineering.*—Of the two large installations undertaken, a new case for the natural asphalt exhibit, which has been under construction for about 6 months, is nearing completion, and construction of a base for the cable car that has stood blocked up on timbers in the east hall was started toward the close of the year.

Completion of a new wall case early in the year permitted a more compact and better installation of metrology exhibits, which in turn provided space for the tools and dividing engines previously exhibited in another hall. This change yielded an exhibition hall for the exclusive use of the automobile collection and permitted considerable improvement to be made in the exhibition of old cars. A complete new operating exhibit of the automatic telephone switchboard was installed by the donors.

Several improvements in the exhibition of aircraft were made, notably, a wood and steel base for the Antarctic plane *Polar Star* and an improved suspension of the *Spirit of St. Louis*. Upon the return of the models of commercial aircraft lent to the War Department for exhibition at the Great Lakes Exposition, a better exhibition of material relating to the history of airmail was effected. Fred C. Reed and Kenneth M. Perry, aide and preparator, respectively, made good progress with the permanent installation of stored collections. The value of this work has been demonstrated by the ease with which students in search of detailed material have been able to use the collections without the physical labor previously involved in moving stored material.

An important special exhibit was arranged during the year to commemorate the twentieth anniversary of air-mail service in the United States, which was celebrated during the week of May 15. Paul E. Garber, assistant curator, devoted considerable time to the collecting of objects and information for the display and was able to prepare an exhibit that was favorably noticed by Post Office officials and air-mail enthusiasts. The one-hundredth anniversary of the inauguration of ocean steam navigation was noted by a small special display of three panels of photographs in the boat hall.

*Textiles, organic chemistry, wood technology, agricultural history, and medicine.*—In the course of the year 7 new installations and approximately 50 rearrangements of exhibition materials were completed in these divisions and sections. Of material help in this work was the assistance of 6 W. P. A. workers, 1 of whom, Carvel H. Kirtley, prepared 9,574 wood samples for the study collections.

Mrs. E. W. Rosson, senior scientific aide, devoted much of her time to developing new and rearranging old exhibits of early American textiles and needlecraft. She also supervised the cataloging and instal-

lation of specimens and directed the clerical work of the office. The assistant preparator, Edward A. Avery, in addition to the preparation of special installation fixtures and the setting up of exhibits in textiles, wood technology, organic chemistry, and medicine, gave much of his time to the supervision of the daily work of four W. P. A. workers.

The routine preservation work carried on during the year consisted of making and changing preserving solutions; fumigating, cleaning, and dusting specimens; disinfecting cases and materials subject to damage by insects; and maintaining operating exhibits. As many new labels were printed as could be turned out by the Museum Print Shop, but the majority of the labels were typed on the label machine. Some labels were prepared by the cooperating firms and printed on standard cardboard furnished by the Museum.

*Graphic arts.*—During the year in the graphic arts section the exhibit of drawing in black and white, colored crayons, pastel, and water-color pencils was greatly improved by the addition of the latest product in each substance and new information. All the pictures were rematted and placed under glass for their protection from insects and dirt. Four new exhibition cases made possible a more efficient showing of the technical exhibits of etching and lithography. The substitution of good-looking cases for aged cases of 50 years ago gives a more dignified appearance to the connecting range.

Five new storage cases made possible the better arrangement of the mounted material. Four of the traveling exhibits were remounted. This involved the cutting of about 400 mats. Over 300 other mats were cut and the specimens mounted in them. If this work can be continued, the entire series of the division would be in excellent condition.

Special exhibitions held during the year were as follows:

#### GRAPHIC ARTS

Walter J. Phillips, Winnipeg, Manitoba: 50 wood-block prints in black and white and in color; October 1937.

Joseph Margulies, New York City: 54 etchings and lithographs; November 1937.

Lyman Byxbee, Omaha, Nebr.: 97 etchings, drypoints, aquatints, and soft-grounds; December 1937.

Thomas W. Nason, Reading, Mass.: 57 wood and metal engravings; January 1938.

Thomas Handforth, Hingham, Mass.: 50 etchings and lithographs; February 1938.

James E. Allen, New York City: 50 etchings and lithographs; March 1938.

Leon R. Pescheret, Whitewater, Wis.: 55 etchings in black and white and in color; April 1938.

Frank A. Nankivell, New York City: 50 etchings and mezzotints in black and white and in color; May 1938.

## PHOTOGRAPHY

J. P. Johansson, Washington, D. C.: 34 pictorial prints; September 1937.

Dr. J. B. Pardoe, Bound Brook, N. J.: 106 pictorial prints; October 1937.

H. E. West, Arlington, Va.: 77 pictorial prints; November 1937.

The Camera Club, New York City: 58 pictorial prints; December 1937.

Lt. Joseph N. Wenger, Edgemere, Md.: 43 pictorial prints (all Chinese subjects); January 1938.

American Photographic Publishing Co., Boston, Mass.: 98 pictorial prints; February 1938.

Associated Telephone Camera Clubs, New York City: 43 pictorial prints; March 1938.

Mrs. Anna Eckhart Boris, Cleveland, Ohio: 25 prints of her late husband, Nickolas Boris; April 1938.

Edward Alenius, Basking Ridge, N. J.: 50 pictorial prints; April 1938.

## INVESTIGATION AND RESEARCH

Research by members of the staff of the department is largely routine in nature and usually undertaken to develop facts about some detail of engineering or industrial development or invention for the purpose of locating and selecting material for the collections; the preparation of permanent and special exhibits; and the furnishing of information for reply to many inquiries.

Dr. F. L. Lewton, curator of textiles, continued his studies in connection with the invention and development of the cotton gin. The results appeared in the appendix to the Annual Report of the Smithsonian Institution for 1937 under the title "Historical Notes on the Cotton Gin." A study of the sources and uses of wild silk by Dr. Lewton was prompted by the gift of new material collected in Mexico and the rediscovery of specimens of wild silk in the old textile exhibits stored since 1890. He is now engaged in a study of all the specimens in the Museum illustrating the decoration of fabrics by pattern resist dyeing of warp and weft, tie-dyeing resist, and "Ikat" and "Palengi" techniques, and in tracing their distribution in Central and South America.

William N. Watkins, assistant curator, section of wood technology, investigated the 30 woods in the Panama collection in order to be assured that their identity could not be questioned. This was done preparatory to sending a portion of the collection to Dr. Ellwood S. Harrar at Duke University, who had agreed to return mounted slides for microscopical examination. The work not only covered the checking of each plant sheet backing these woods but also the checking of the woods with others of the same species until agreement was reached. Examinations were continued, too, on woods of the Krukoff collection from Brazilian Amazonia.

The staff of the department was consulted frequently during the year by writers, students, engineers, patent attorneys, and members of the staffs of other museums or historical societies seeking information or advice in the preparation of exhibits or museum programs. Study specimens of woods for technical research and for use in training students in crime detection were furnished to the Technical Research Laboratory, Police Academy, Brooklyn, N. Y., and to the Institute of Criminal Science, Washington, D. C. In connection with studies of toxic plants, B. A. Krukoff, associated with the New York Botanical Garden, requested and received from the Museum samples of the bark, sawdust, and chips of all the woods of the Simarubaceae which he had collected on his fifth expedition to Brazilian Amazonia.

Utilization of the department's collections by other Government bureaus continued. Attorneys of the Department of Justice studied units of the aircraft collection in connection with infringement suits; data were furnished the Department of Commerce for use in preparing a series of radio broadcasts "Stories of American Industries"; assistance was rendered the Office of Education, Department of Interior, in the preparation of the "World is Yours" series of radio broadcasts. One of these, on "Electricity," was awarded second place in a national rating for the year by the Institute of Education by Radio. As in former years, the department made many identifications of wood materials for the Forest Products Division, Department of Commerce; Procurement Division, Treasury Department; National Park Service, Interior; and the Navy Department.

Frank A. Taylor, curator of engineering, visited industrial plants in the vicinity of Pittsburgh to examine engineering relics and to discuss proposed new exhibits tentatively offered by industrialists there. At the same time he visited the Carnegie Museum at Pittsburgh. Dr. F. L. Lewton, curator of textiles, visited Clinton, Mass., to examine relics of Erastus Bigelow, the most famous American inventor of carpet machinery, preserved in the local museum of his home town. He devoted also some time in Williamsport, Md., to study the tanning of leather in the factory of W. D. Byron & Sons.

Thirteen lots of material were received for examination and report. In addition, the staff made almost daily examinations and identifications of watches, textile fabrics, wood, prints, metals, and scientific apparatus brought in by inquirers.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distribution of specimens from the department totaled 3,715, consisting of specimens, photographs, and prints. Four traveling exhibits on "How Prints are Made," comprising 2,752 specimens, were lent to 12 colleges, 7 public libraries, 3 high schools, and 3 art

museums scattered in 15 States. In addition, the department donated 170 items to educational institutions; distributed 518 specimens as loans, and made 271 exchanges. Of the gifts, a noteworthy one was that of four transparencies made by Edward Muybridge, pioneer in motion-picture photography, to the Royal Photographic Society, London.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The specimens in the department at the close of the year numbered 129,480, distributed as follows:

Engineering	16,394
Textiles	15,004
Wood technology	11,244
Organic chemistry	22,030
Foods	977
Agricultural history	1,220
Medicine	18,497
Graphic arts, including photography	44,114
Total	129,480

## DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

In addition to research accomplished by members of the staff of the division of history during the year, much work was completed in connection with the listing, marking, cleaning, and arranging of specimens in the exhibition and storage series. This work was facilitated by the fact that except in the case of the numismatic collection no changes of major importance were made in the general arrangement during the past year.

### ACCESSIONS

The additions to the collection received during the year, 85 accessions, including 2,582 specimens, exceeded those of last year by more than 600 specimens.

The art collection was increased by a portrait of Admiral Albert Gleaves, U. S. Navy, which was presented by Mrs. Gleaves, and a portrait of Brig. Gen. Hiram Berdan, presented by the estate of Miss Ella F. Larkin.

To the costume collection was added a silk dress worn by Miss Katherine Brooke, of Middleburg, Va., on the occasion of her marriage in 1792, and a silver knee buckle worn during the War of the Revolution by Lt. Col. Levin Powell of the Continental Army. These two eighteenth-century relics were presented by Miss Anne Magill Fauntleroy.

To the large collection of mementos of the career of Brand Whitlock already presented to the Museum by Mrs. Whitlock was added as a further gift from her the appointment document of Mr. Whitlock as Ambassador to Belgium dated September 30, 1919, and the diploma of the Medaille Commémorative du Comité National that was awarded to Mr. Whitlock by the Belgian Government on November 13, 1919.

The series of awards and personal mementos relating to the history of science was enriched by the gift of a number of gold medals, academic hoods, and other objects pertaining to the scientific career of Dr. Charles D. Walcott, Secretary of the Smithsonian Institution, 1907-1927. These objects, which were presented by Mrs. Charles D. Walcott, included the J. J. Bigsby medal awarded to Dr. Walcott in 1895 by the Geological Society of London; the F. V. Hayden medal awarded to him in 1905 by the Academy of Natural Sciences of Philadelphia; the Wollaston medal awarded to him in 1918 by the Geological Society of London; the Mary Clark Thompson medal awarded to him in 1921 by the National Academy of Sciences; the Albert Gaudry

Prize Plaque awarded to him in 1917 by the Geological Society of France; and academic hoods and other insignia worn by Dr. Walcott when he received honorary degrees from the University of Chicago, the University of Pennsylvania, the University of Cambridge, Yale University, St. Andrews University, the University of Pittsburgh, the University of the State of New York, and the University of Paris. Included also are a gold watch and chain worn by Dr. Walcott and two hammers used by him in the course of his field work as a paleontologist.

Several pieces of parlor furniture made in Paris for President James Monroe in 1817 and used in the White House from that time until 1937 were received as a loan from the White House for an indefinite period. This furniture includes two sofas, two ottomans, eight side chairs, and four armchairs. Each piece is decorated in gilt and upholstered in light-blue damask. The carvings, which are few and simple, represent oak leaves and scroll work. The upholstery designs include oval shields, plumes, and floral designs.

To the numismatic collection there came from the Treasury Department examples of the United States coins struck at the Denver, Philadelphia, and San Francisco mints in 1937 and a bronze medal commemorating the appointment of Mrs. Nellie Tayloe Ross as Director of the Mint in 1933.

Examples of the following commemorative half-dollars were received: From the Antietam Celebration Commission, two examples of the Antietam half-dollar; from the Arkansas Centennial Commission, two examples of the Arkansas Centennial half-dollar; from the Daniel Boone Bicentennial Commission, one example of the Daniel Boone half-dollar; from the manager of the Norfolk Advertising Board, two examples of the Norfolk half-dollar; from the Pennsylvania State Commission, two examples of the Gettysburg half-dollar.

A lot of current foreign coins was received from the American Numismatic Association as an addition to the large loan collection of this association and includes specimens from Austria, Belgium, Denmark, Germany, Great Britain, Hungary, Italy, Lithuania, Poland, Rumania, Sweden, and Switzerland, as well as examples of many coins struck in 1936-37 for circulation in various other parts of the world.

A number of interesting medals were added to the numismatic collection, including a bronze medal commemorating the invention of the bifocal lens by Benjamin Franklin in 1784, from the Bausch & Lomb Optical Co.

The philatelic series was increased by the transfer from the Post Office Department of 2,088 specimens of current foreign postage stamps, cards, and envelopes.

## INSTALLATION AND PRESERVATION OF COLLECTIONS

As in the case of most large museum collections developed during a long period of time without a corresponding increase in housing facilities, the National Museum historical collections, both exhibition and storage, now occupy a crowded space. Very few general changes can be made in these collections until more adequate housing facilities are available. A complete survey of the storage system was undertaken by Assistant Curator Charles Carey, and as a result several improvements were effected.

A number of changes were made in the arrangement of the art, costume, domestic, military, and numismatic collections. To the art exhibition series was added a group of drawings by Robert Dudley, showing historic scenes during the laying of the first Atlantic telegraph cables. The domestic collection was rearranged in order to install the James Monroe furniture received from the White House.

The most important addition to the exhibition series was the completion of four cases devoted to the achievements and careers of the four secretaries of the Smithsonian Institution who served during the period from 1846 to 1927. The cases have been placed near the center of the main hall in the Smithsonian Building. The installation of these cases was proposed in 1934, and two of them were completed in 1935. During the past year material to complete the Spencer F. Baird case was procured from the division of birds through the cooperation of Dr. Herbert Friedmann and from the Smithsonian Archives through the help of H. W. Dorsey. Material for the Charles D. Walcott case came through the generous cooperation of Mrs. Charles D. Walcott. Several fine examples of the trilobites collected by Dr. Walcott were contributed by the department of geology through Dr. R. S. Bassler, and a number of interesting Walcott documents were supplied from the Smithsonian Archives.

Three important jobs were completed during the year in connection with the numismatic collection. The series of silver coins was cleaned; the entire collection was reinstalled in accordance with a fixed topical and chronological scheme of arrangement; and the exhibition series was enriched by the addition of many specimens not previously exhibited. This work entailed the individual handling of thousands of specimens and the verification of a corresponding number of labels and records.

The collection of United States medals was completely reinstalled, and several new medals were added. The entire series was divided into the following groups: Local medals of award; local commemorative medals; local portrait medals; national medals of award; and national commemorative medals. Each of the groups includes many medals of special historical and numismatic interest. The series is of

special interest also from the viewpoint of portraiture and is an expression of the local interest in various phases of American biography. The present arrangement of the hall renders it easy for the visitor to locate the coins and medals belonging to any one of the groups.

A number of mechanical improvements were made in the methods of exhibiting the collection, including a more regular arrangement of the shelving, the relining of several cases, and the adoption of a type of label especially suited to indicate the historical significance of the main types of material shown in the numismatic hall.

#### INVESTIGATION AND RESEARCH

As in previous years, the division of history cooperated with the Treasury Department in assembling data concerning the legal status of American and foreign gold coin since the withdrawal in 1933 of United States gold coin from circulation. Cooperation with the Department of the Interior included a review of the following Smithsonian-Bureau of Education radio broadcasts: "The American Sword"; "The American Medal"; "Abraham Lincoln"; "Christmas in the Colonies"; and "Independence Day." Cooperation with the Post Office Department included the preparation of a special exhibition under the auspices of the department of arts and industries, of postage stamps shown on the occasion of the celebration of the twentieth anniversary of the establishment of air mail in the United States and in connection with the diffusion of information concerning the original objects that have served as subjects for postage-stamp designs. Cooperation with societies and institutions included the installation of a special exhibition of coins in the Natural History Building on the occasion of a lecture given by William M. Simpson, under the auspices of the Twentieth Century Club, on the making of coins and medals.

Considerable research was undertaken to aid in the preparation of an adequate and comprehensive set of exhibition labels for the entire historical series to supersede the present series. The preparation of labels of this type is particularly important in connection with exhibits that include objects of intrinsic as well as historical interest, such as the Lewis collection of domestic mementos of General and Mrs. Washington, the John B. Copp collection, and the Myers-Bailey-Mason-James collection.

Much work was accomplished in the task of assembling a series of photographic negatives to represent adequately the varied character of the historical collections. The section of philately assembled a large series of negatives illustrating original objects that have served as subjects for the designs of United States postage stamps. These

negatives should prove of much interest and value to collectors who are now devoting attention to this form of philatelic research.

The curator has assembled much data in connection with the narrative history of numismatic materials, the classification of such materials, and the best methods of utilizing them in the general field of historical museum work. As the result of research of this character an entirely new concept of the science of numismatics will eventually result, and the advantages to be derived from the proper use of numismatic materials in the museum field will be made clear to the student and to the general public.

A scientific inquiry is being pursued by the assistant curator on the subject of military uniforms and insignia. The evolution of the American uniform, the origin and symbolism of the designs, and the relationship between the American and foreign series of such objects all offer a fertile field for research to the museum investigator. The data collected in this connection are not merely of literary value, but often serve the practical purpose of assisting in the identification of historical portraits.

#### DISTRIBUTION AND EXCHANGE OF SPECIMENS

During the year 24 specimens were returned to the owners or their legal representatives, and 5 specimens were lent for study and display purposes.

#### NUMBER OF SPECIMENS UNDER DIVISION

Art	4,693
Costume	4,228
Domestic	10,763
Military	27,630
Narrative	2,255
Naval	2,583
Numismatic	47,157
Philatelic	402,572
Total	501,881

## ACCESSIONS DURING THE FISCAL YEAR 1937-38

(EXCEPT WHEN OTHERWISE INDICATED THE SPECIMENS WERE PRESENTED, OR WERE TRANSFERRED IN ACCORDANCE WITH LAW BY BUREAUS OF THE GOVERNMENT)

ABROTT, W. C., Capetown, South Africa: 29 stone artifacts, presumably Neolithic, found on surface in Barkly West, Union of South Africa (145645).

ACADEMY OF NATURAL SCIENCES, Philadelphia, Pa.: (Through Dr. H. A. Pilsbry) 5 mollusks (149866); (through J. A. G. Rehn) 19 insects (11 species), including 3 paratypes of 2 of the species (147314, exchange).

ACADEMY OF SCIENCE OF THE U. S. S. R., Moscow, U. S. S. R.: 35 minerals from the U. S. S. R. (146464, exchange).

ADDISON, CAROLINE H.: (Through Union Trust Co., Washington, D. C.) 1 French fan in case and bracket, 1 sterling silver caster by Thomas Warner, of Baltimore, Md., and 2 early nineteenth century silver salt cellars (136183, bequest).

AGERSBORG, DR. H. P. K., Centralia, Ill.: 4 snakes and 2 mammals from Clinton County, Ill. (148185).

AGRICULTURA, MINISTERIO DE, Bogota, Colombia: 16 insects from Colombia (133121); 151 plants from Colombia (145133, exchange); (through Dr. E. Perez Arbelaez) 26 plants from Colombia, collected by C. E. Chardon (144407, exchange).

AGRICULTURA, MINISTERIO DE, Rio de Janeiro, Brazil. (See under Instituto de Biología Vegetal.)

AGRICULTURE, U. S. DEPARTMENT OF: *Bureau of Biological Survey*: 1 skeleton of black swan (144385); 1 young diamond-backed rattlesnake from Torreya National Park, Fla. (145143); 125 fishes, 1,000 invertebrates, and 2,207 mollusks collected during the summer of 1937 by members of the Biological Survey Expedition to the Aleutian Islands (145827); 1 rattlesnake from Coahuila, Mexico (147031); (through Dr. Clarence Cottam) 1 mollusk from San Luis Island, Gulf of California. (146264); (through Neil Hotchkiss) 1 fern from Alaska and 2 plants from the Aleutian Islands (146582, 146750); (through W. F. Kubichek) 36 shells from the White River Migratory Waterfowl Refuge

in Monroe, Arkansas, Desha, and Phillips Counties, Ark. (146681); (through O. J. Murie) male skeleton (with skull) from old village site in Constantine Harbor, Amchitka Island; 3 skulls, 1 with lower jaw (probably female), from a cave on Ilak Island, Alaska; and 4 whale fetuses (145319); (through F. M. Uhler) 3 turtles from Florida, collected by F. M. Uhler and C. F. Smith (146423); (through S. P. Young) 1 snake, 13 lizards, 1 grasshopper, and 1 spider from the Carmen Mountains, Coahuila, Mexico (146730); 1,232 mammals transferred between July 1, 1937, and June 30, 1938, and not otherwise accessioned (148647).

*Bureau of Entomology and Plant Quarantine*: 8 mollusks, 122 isopods, 1 copepod, about 50 ostracods, 1 insect, 8 slugs, and 1 young Storer's snake (142908, 143577, 144282, 144376, 145505, 146039, 146050, 146399, 146707, 147223, 147467, 147983); 1 slug, 3 mollusks, and 20 isopods from Cuba, Mexico, and Nicaragua (144477, 145234); 154 pinned and many alcoholic Puerto Rican ants, including 47 named forms, 2 of which are represented by cotype material (145382); 11 isopods, 1 parasitic copepod, and 2 mollusks from England (145843); 3 mollusks from Villalba, Puerto Rico (147476); 7 snails from Rehoboth Beach, Del. (148423); about 54,000 miscellaneous insects retained from material received for identification during the year (148533); (through E. A. McGregor) 19 miscellaneous insects (93190).

*Bureau of Plant Industry*: (Through Dr. S. F. Blake) 3 plants from Utah and Arizona (144413, 147056), 27 photographs and 14 fragmentary plants (146079, 146576); (through Mrs. Agnes Chase) 5,245 plants (145005, 148554); 89 plants from Western United States (147397, 147950); (through C. O. Erlanson)

39 plants from Peru (140561); (through Dr. Anna E. Jenkins) 1 plant from Brazil (147488); (through Dr. T. H. Kearney) 438 plants from Arizona and Nevada (144409, 144417, 146713, 146824, 147089, 147143); (through R. H. Peebles) 4 mosses from Arizona (145246); (through J. R. Swallen) 6 plants from Florida and Texas (146104, 146583).

*Forest Service*: (Through W. A. Dayton) 1 type plant from Utah (144974), 1 plant from New Mexico (147257); (through Dr. A. P. Jacot) 7 insects and 1 fly larva (144689, 145021), 4 miscellaneous insects and 17 insect larvae from New Hampshire (145385, 146661); (through E. L. Little, Jr.) 53 lizards, 1 toad from the Roosevelt Reservoir, Ariz. (145981); (through J. V. Schaffner) 9 insects (147420).

*Office of Experiment Stations*: (Through C. F. Pennington) 1 vanilla plant from Puerto Rico (144534).

*Extension Service*: 1 grasshopper and termite exhibit (148015, deposit); 3 photographs of sheep (146427).

*Weather Bureau*: 1 kite meteorograph of the type invented by Dr. C. F. Marvin and used by the Weather Bureau attached to kites for recording conditions at high altitudes (144483).

AHRENS, CARSTEN, McKeesport, Pa.: 10 dragonflies (139165, exchange).

AINSLIE, C. N., Sioux City, Iowa: 185 Microlepidoptera (144457, 148532), 625 insects, including 20 species of ants (144604, 147959).

AIRD, J. O., Roseau, Dominica, British West Indies: 17 bottom samples from the Island of Dominica (145426, 147436).

AKERS, PAUL, Washington, D. C.: 13 salamanders from East Radford, Va. (144983).

ALABAMA MUSEUM OF NATURAL HISTORY, Mobile, Ala.: (Through H. S. Barber) 1 insect from Alabama (144495).

ALABAMA POLYTECHNIC INSTITUTE, Auburn, Ala.: (Through J. F. Robinson) 6 shrimps from near Selma, Ala. (144130).

ALENIUS, EDWARD, Basking Ridge, N. J.: 50 pictorial prints, shown during April 1938 (147561, loan); 3 pictorial prints, "Colorful Roses" (3-color bromoil transfer), "A Cellar Corner" (bromide), "Central Park Lake" (Fresson carbon) (148013).

ALLAIRE, WOODWARD & Co., Peoria, Ill.: 1 sample each of rosin, Virginia snakeroot, red-clover heads, and German fennel seed for the *materia medica* collection (147900).

ALLARD, H. A., Washington, D. C.: 4,200 plants from Virginia, mainly from the Bull Run Mountains (147399).

ALLCORN, Mrs. J. B., Comanche, Tex.: 1 complete Cretaceous oyster from Williamson County, Tex. (145498, exchange).

ALLEN, A. R., Trinidad, Colo.: 1 sample of natural coke and 1 of oil-bearing basalt (144574).

ALLEN, E. R., Silver Springs, Fla.: 4 turtles from Florida (144677, 145592); 1 paratype of a new subspecies of snake from Florida (145334); 1 skink from near Silver Springs, Fla. (145950). (See also under Florida Reptile Institute.)

ALLEN, J. E., New York City: (Through Kennedy & Co.) 50 prints (etchings and lithographs) for special exhibition during March 1938 (146814, loan).

ALLEN, J. FRANCES, East Radford, Va.: 12 mollusks from the Patuxent River (144446, 144636).

ALVAREZ, DR. W. C., Rochester, Minn.: 6 small photographs relating to the history of medicine (145146).

AMEEL, DONALD, Cheboygan, Mich.: 3 slides of helminths (145028).

AMERICAN AUTOMATIC ELECTRIC SALES Co., Chicago, Ill.: (Through E. H. Holt) 1 operating exhibit of an automatic telephone exchange with 2 hand-set wall phones in transparent plastic cases (148570).

AMERICAN CAR & FOUNDRY Co., Wilmington, Del.: (Through A. H. Gauthrop) Half models of the navire de guerre *Admiral de Joie* and the 3-masted schooner *Daniel S. Williams, Jr.*, from the Jackson & Sharp shipyard (148163).

AMERICAN HEART ASSOCIATION, INC., New York City: 1 strip film entitled "Bacterial Endocarditis and Valvular Disease" (148538).

AMERICAN LEGION TEXAS CENTENNIAL COMMITTEE: (Through Treasury Department, Bureau of the Mint) 6 examples of the Texas Centennial half-dollars struck at the Denver, Philadelphia, and San Francisco mints in 1938 (147058).

AMERICAN MEDICAL ASSOCIATION, Chicago, Ill.: 28 posters illustrating "Patient Medicines and Quackery" and 5 posters relating to "Infant Welfare" (145862).

AMERICAN MUSEUM OF NATURAL HISTORY, New York City: 1 beetle (141530, exchange); 2 ants (2 subspecies) (145578); 122 brachiopods from Mesozoic deposits of Europe (148354, ex-

change); (through Dr. W. K. Gregory) casts of the palate and mandible of a fossil ape (145749); (through A. J. Mutchler) 2 beetles (147313, exchange).

AMERICAN NUMISMATIC ASSOCIATION, New York City: (Through Moritz Wormser) 109 coins from Australia, Austria, Basque Republic, Belgian Congo, Belgium, Brazil, Canada, Costa Rica, Denmark, Dutch East Indies, Eastern Mongolia, Egypt, Fiji, Germany, Great Britain, Hungary, Hyderabad, Iraq, Italy, Jamaica, Jersey, Liberia, Lithuania, Mexico, Mozambique, New Zealand, Philippines, Poland, Rumania, South Africa, Southern Rhodesia, Sweden, and Switzerland, struck 1933-1938 (144528, 147070, loans).

AMERICAN PHOTOGRAPHIC PUBLISHING Co., Boston, Mass.: 98 pictorial prints, originals of prints in the 1938 American Annual of Photography (146755, loan).

AMERICAN POTASH INSTITUTE, Washington, D. C.: 1 exhibition block of sylvite and halite from Mulhouse, Alsace, France (145282).

AMERICAN VISCOSA CORPORATION, Marcus Hook, Pa.: Model to illustrate the spinning of rayon by the viscose process (145204).

AMES, Prof. OAKES, Cambridge, Mass.: 134 orchids from the Philippines (147395, exchange).

ANDERSON, ANNA, Washington, D. C.: 2 horseshoe crabs, 1 seahorse, collected at Nantucket Island, 1911 (148429).

ANGELL, J. W., New York City: 2 beetles (146826).

ANTITAM CELEBRATION COMMISSION, U. S., Washington, D. C.: (Through Treasury Department, Bureau of the Mint) 2 Antietam half-dollars struck in 1937 (145194).

ANTUNES, P. C. A., São Paulo, Brazil: 2 mosquitoes, male and female paratypes (146734); 1 fly (148095).

ARBELAEZ, Dr. E. P. (See under Agricultura, Ministerio de.)

ARCTIC INSTITUTE, Leningrad, U. S. S. R.: 2 birds from Siberia (143505, exchange).

ARKANSAS CENTENNIAL COMMISSION, Little Rock, Ark.: 2 Arkansas Centennial half-dollars struck in 1938 (147057).

ARNOLD, G. (See under National Museum of Southern Rhodesia.)

ARSENE, Rev. Brother G., Santa Fe, N. Mex.: 1 cultivated fern (145034); 99 plants from New Mexico (145966).

ARTHUR B. F., Winchester, Va.: 1 early nineteenth century steel dish cover from the Joseph Gist Plantation,

Pineckney Court House, S. C., and 1 historical memorandum pertaining thereto (145162); 1 pocket dental case with 5 instruments fitting into a common handle, 1 pocket case with a complete spring lancet, 1 pocket case containing an extra blade for the lancet and a \$20 bill of the Confederate States of America (145290).

ASCHHEMEIER, C. R., Washington, D. C.: 49 fishes from the Potomac River at Sandy Hook, Md. (144242, 145563). (See also under Smithsonian Institution, National Museum.)

ATKINSON, R. E., University, La.: 1 plant from Louisiana (145186).

AUGUSTO, Brother, Medellin, Colombia: 2 insects from Colombia (146139).

AULD, D. V., Washington, D. C.: Tail of a lyre bird (148005).

AZAEL, Brother, Cali, Colombia: 40 plants from Colombia (147290).

BABBITT, L. H., Petersham, Mass.: 8 turtles from Lake Champlain, Swanton, Vt. (145636).

BACHER, Mrs. OTTO, Rock Tavern, N. Y.: 6 original etchings by the late Otto Bacher (146603).

BAILEY, A. M. (See under Oberlin College.)

BAILEY, VERNON, Washington, D. C.: 1 small kangaroo rat (147092).

BAILEY HORTORIUM, Ithaca, N. Y.: 2 ferns from the Gaspé region (145942, exchange).

BAKER, Dr. F. H., Richmond, Victoria: 61 marine and fresh-water mollusks (145801, exchange); 2 mollusks from Rosebud, Port Phillip Bay, Victoria, Australia (147274, exchange).

BAKER, FRANK. (See under Motion Picture Machine Operators' Protective Union No. 224.)

BAKER, Dr. FRED, Point Loma, Calif.: 1 mollusk from Indochina (145635).

BALL, Dr. C. R., Washington, D. C.: 7 plants from Tennessee (144553, exchange).

BALL, Prof. E. D., Tucson, Ariz.: 312 bugs (114 named species, 77 species represented by 191 paratypes) (146094, exchange).

BALL, W. H., Washington, D. C.: 3 beetles, 3 isopods, 1 crayfish, 4 salamanders, 1 toad, and 3 mollusks from Tennessee (144288); 2 copepods, 100 amphipods, 10 isopods, 8 crayfishes, 5 crabs, 6 barnacles, and 10 annelids (145191).

BANKS, Prof. NATHAN. (See under Harvard University, Museum of Comparative Zoology.)

BARBER, H. G., Washington, D. C.: 810 beetles from Mount Katahdin, Maine (146071).

BARBER, H. S. (See under Alabama Museum of Natural History.)

BARBOUR, Dr. THOMAS. (See under Harvard University, Museum of Comparative Zoology.)

BARKALOW, F. S., Jr., Auburn, Ala.: 1 skull of a deer from Sumter County, Ala. (147133).

BARKER, R. W., Tampico, Tamaulipas: 70 slides of fossil Foraminifera (147306).

BARKLEY, F. A. (See under Montana State University.)

BARNES, R. M., Lacon, Ill.: 4 Lepidoptera (141172).

BARNITZ, ERIC, Gettysburg, Pa.: 4 fly pupae (147285).

BARRET, DR. H. P., Charlotte, N. C.: 1 sample of prehnite and 2 of tourmaline (145466, exchange); 1 sample of uranophane from Twin Pine Mine, Spruce Pine, N. C., and 9 crystals of epidote from Bakersville, Mitchell County, N. C. (148433).

BARTLETT, Capt. R. A., New York City: About 1,000 marine invertebrates, 25 fishes, 1 bird skin, a small collection of insects, 185 mollusks, 3 brachiopods, and a few echinoderms from West Greenland (144924).

BARTLEY, FLOYD, Circleville, Ohio: 9 plants from Ohio (144442).

BARTSCH, DR. PAUL, and DR. G. S. MYERS, Washington, D. C.: 231 fishes and 2 mollusks, collected August 1933 in Shenandoah River, between Bluemont and Berryville, Va., by the donors (144591). (See also under Smithsonian Institution, National Museum.)

BASS BIOLOGICAL LABORATORY, Englewood, Fla.: (Through Stewart Springer) 1,200 marine invertebrates (144132); 41 fishes from various localities collected in 1936-37 by Stewart Springer (144867); 4 ascidians, about 15 crabs, 25 amphipods, 2 isopods, and 2 marine annelids (145621); 9 fishes (145689); 2 pairs of shark jaws taken at Englewood, Fla. (148416).

BASSLER, DR. R. S., Washington, D. C.: 1 5-by-7 camera and case, tripod, no head, with paper film holding magazine, used about 1885 (146994); (with Dr. G. A. Cooper) 133 invertebrate fossils from the Oriskany formation of eastern New York (145852).

BATES, J. M., Washington, D. C.: Insignia of the Camouflage Section, A. E. F., during the World War (145649).

BAUER, MRS. ADELIA D. (See under Eleanor C. Lewis.)

BAUER, MRS. L. A., and MRS. DOROTHEA BAUER WEEKS, Washington, D. C.: 1 cotton and linen tablecloth woven in about 1830 (144426).

BAUSCH & LOMB OPTICAL CO., Rochester, N. Y.: Bronze medal commemorating the sesquicentennial anniversary of the invention of the bifocal lens by Benjamin Franklin in 1784 and bronze copy of the Bausch & Lomb Honorary Science Award Medal (148036).

BAYERISCHEN STAATSSAMMLUNG FÜR PALÄEONTOLOGIE, HISTORIE, GELOGIE, München, Germany: (Through Dr. F. Broili) 854 Mesozoic brachiopods from Germany and other parts of Europe (142178, exchange).

BAYLIFF, Prof. W. H., Annapolis, Md.: 14 isopods, representing cotypes of a new species (145646).

BEACH, W. N., and J. W. WEBB, New York City: 27 mammals from Alaska (144762).

BEAMER, Prof. R. H. (See under University of Kansas.)

BEATTY, H. A., Christianstad, St. Croix, Virgin Islands: 38 mammals from Venezuela and 6 mammals, 1 bird's head, 25 fishes, 362 insects, 316 mollusks, and 130 crustaceans from Virgin Islands (143883, 144224, 145174, 145766, 147432, 148065); 3 hoatzin eggs (144692); a small collection of miscellaneous insects (145244).

BEAUREGARD, MRS. N. H. (See under Missouri Historical Society.)

BECK, Prof. H. H., Lancaster, Pa.: 1 sample of sphalerite from Friendsville, Pa. (146072).

BECKER, W. B., Amherst, Mass.: 3 lots of nematodes (144086).

BECKWITH, C. S. (See under New Jersey Agricultural Experiment Station.)

BELL TELEPHONE LABORATORIES, INC., New York City: (Through W. C. F. Farnell) A dissected display sample of coaxial cable (145350).

BENEDICT, J. E., Jr., Washington, D. C.: 2 plants from Colorado (144419, exchange); 1 fish from Benedict, Md., collected by Dr. W. R. Maxon (145623).

BENESH, BERNARD, North Chicago, Ill.: 102 beetles (144497, 146594, 146993).

BENZING, J. C., Washington, D. C.: 9 impressions of engraved and etched bookplates, designed and executed by the donor (145581).

BEQUAERT, DR. JOSEPH, Boston, Mass.: 15 wasps (146913, 147538, exchange).

BEREA COLLEGE, Berea, Ky.: (Through Anna L. Walker) 1 hand-woven 7-harness, 12-treadle, "summer and winter" weave: "Snowball" pattern with "Pine Tree" border, copied from an old coverlet, and woven with homespun, indigo-dyed yarn and white cotton yarn, at Berea College in 1938 (147895).

BERNHARDT, ALTON, North Liberty, Ind.: (Through Dr. M. W. Lyon, Jr.) Cranial portion of the skull of a moose, from near North Liberty (145778).

BERRY, Dr. C. T., Baltimore, Md.: 1 type mammal from the Miocene of Maryland (146753).

BERRY, Dr. S. S., Redlands, Calif.: 3 paratypes of West American land shells (145147).

BETOMBEAU, O. H., London, England: About 240 Middle Barton (Upper Eocene) Mollusca and fish teeth (142384).

BIERIG, ALEXANDER, Habana, Cuba: 78 beetles (65 species, all paratypes except 18), from Cuba (147291, exchange).

BIRKHOLZ, CLIFFORD, Battle Creek, Mich.: 2 fishes from Minges Brook, Battle Creek, Mich., collected by the donor (142099); 1 tapeworm (145534).

BISHOP MUSEUM, BERNICE P., Honolulu, Hawaii: 2 grasses from the Hawaiian Islands (145629, exchange).

BISHOP, Prof. S. C., Rochester, N. Y.: 2 salamanders (type and paratype) from Texas (144481).

BISSELL, Mrs. Sarah E., Pittsburgh, Pa.: A collection of diatoms gathered by the donor's father, David Shields Wilson (147122).

BJØRLYKKE, Dr. HARALD, Trondhjem, Norway: 1 sample of thortveitite from Iveland, South Norway (148435).

BLACKMORE, Mrs. FLORENCE, Victoria, British Columbia: (Through J. F. G. Clarke) 2,111 miscellaneous Lepidoptera (144366).

BLAIR, Dr. K. G. (See under British Government, British Museum.)

BLAKE, Prof. I. H., Lincoln, Nebr.: 14 leeches and 3 flatworms (146051); 2 adult and 2 larval amphibians from Centennial, Wyo. (147117). (See also under University of Nebraska.)

BLAKE, Dr. S. F., Washington, D. C.: 3 fragments of fossil Crustacea (145356); 3 vials of fossil crustacean fragments from the Tertiary of Florida (146328); 1 perfect fossil mollusk from the Miocene of St. Marys City, Md. (146429); 1 skull of a loon (147356); 1 periotic bone of a whalebone whale from the Miocene of Calvert Beach, Md. (147360). (See also under U. S. Department of Agriculture Bureau of Plant Industry, and Dr. Ira W. Clokey.)

BLEIFUS, C. J., Hollister, Calif.: A collection of fossil crabs from California (145003); about 150 fossil invertebrates from the Tertiary rocks of California (145193); 40 valves of barnacles from the *Tamisoma* beds of California (146625).

BLOMQVIST, Prof. H. L. (See under Duke University.)

BOEING AIRCRAFT Co., Seattle, Wash.: 2 models, each  $\frac{1}{16}$  size, of historic Boeing mail planes, type C seaplane and type B-1 flying boat, the originals of which maintained international airmail service with Canada in 1919 (145332).

BOHART, R. M., Berkeley, Calif.: 11 slides of insects (9 species), all paratypes (146351).

BOLIN, Dr. R. L. (See under Hopkins Marine Station.)

BONDAR, Dr. G., Agua Prita, Bahia, Brazil: 21 insects, comprising 4 species of named Lepidoptera and 5 species of named *Anastrepha* from Brazil (145340).

BONN, UNIVERSITY OF; Geological Department, Bonn, Germany: (Through Dr. J. Wanner) 9 examples of Miocene crinoid from Madeira Islands, East Indies (145262).

BORIS, Mrs. ANNA E., Cleveland, Ohio: 25 prints by the late Nickolas Boris for exhibition from March 15 to April 30, 1938 (147013, loan); 3 pictorial prints, "Confidence," "Challenge," and "Spartan," the work of the late Nickolas Boris (148042).

BOTANIC GARDENS, Singapore, Straits Settlements: 186 ferns from Malaya (145224, exchange).

BOTANISCHES MUSEUM, Berlin-Dahlem, Germany: Photograph of a fern (146417, exchange); (through Dr. H. Sleumer) 2 photographs of plants (144650, exchange).

BOVELL, MARJORIE, Spanish Town, Jamaica: About 500 insects collected in Jamaica during 1937 (146109).

BOWLING, Lt. JACK, Washington, D. C.: 1 bookplate print (144454).

BOWMAN, Dr. J. R., Pittsburgh, Pa.: 20 beetles from East Liverpool, Ohio (144466).

BOY SCOUT JAMBOREE TROOP 27, Greensboro, N. C.: 1 long exhibition slab of flexible sandstone from North Carolina (144464).

BRACELIN, Mrs. H. P., Berkeley, Calif.: 1 plant collected in Brazil by Mrs. Ynez Mexia (146546).

BRACKETT, STERLING, Madison, Wis.: 8 slides of cotype material of parasitic worm (148053).

BRADLEY, HELEN M., Bridgeport, Conn.: 1 skein of silk, reeled, twisted, and prepared by Abigail Sherwood from silk cocoons raised by her on Hulls Farms, Fairfield County, Conn., in 1834; a dress made by her from material woven in England from cocoons raised by the same Abigail Sherwood, aunt of the donor; also a bill showing the cost for spinning, weaving, and printing the dress material (141038).

BRAECKLEIN, J. G., Bethel, Kans.: Shell vessels and beads, copper beads, pins, galena, chipped projectile points, etc., from Temple Mound, 5 miles north of Spiro, Le Flore County, Okla. (145540); the cranial portion of a bison skull from Kansas (146439).

BRANSON, Prof. E. B., Columbia, Mo.: 7 Devonian brachiopods from Missouri (148007).

BRAY, R. S., Washington, D. C.: Skin and skull of a shrew collected near Little Pimmett Run (148089). (See also under J. P. E. Morrison.)

BRIDGE, Dr. JOSIAH, Washington, D. C.: 9 parasitic copepods taken from goldfish (144088); (with Dr. G. A. Cooper) 29 Pleistocene shells from a cut in the road, Chazy, N. Y. (146303, collected for the Museum). (See also under Dr. G. A. Cooper.)

BRIDWELL, J. C., Washington, D. C.: 390 mollusks from Kaneohe Bay, Oahu, Hawaiian Islands (144551); 75 land shells from nearby Virginia (145830, 148562); 1 glazed stoneware bottle (146612).

BRIGHAM YOUNG UNIVERSITY, Provo, Utah: (Through Bertrand Harrison) 672 plants from Utah (146718).

BRIGHT, JOHN, Pittsburgh, Pa.: 64 plants, mainly from California (146990).

BRIMLEY, C. S. (See under North Carolina Department of Agriculture.)

BRISCOE, M. S., Harpers Ferry, W. Va.: 5 mollusks from Jefferson County, W. Va. (147132).

BRITISH GOVERNMENT:  
*British Museum (Natural History)*, London, England: 89 ferns from St. Lucia (146268, exchange); 1 white-beaked dolphin, skeleton only, and the cast of 1 porpoise skull (146671, exchange); (through Dr. K. G. Blair) 1 beetle (144465, exchange); (through Horace Donisthorpe) 276 ants (83 named species) (146467, 147676); (through Dr. Isabella Gordon) 2 shrimps (145440, exchange); (through J. R. Norman) 36 marine fishes from the Patagonian region (135610, exchange); 1 shark collected by the John Murray Expedition (145566); (through H. W. Parker) 3 frogs from La Plata (146719, exchange); (through D. S. Wilkinson) 86 Hymenoptera (11 species, 3 represented by 25 cotypes) (145008, 145744; exchange).

Royal Botanic Gardens, Kew, Surrey, England: 57 plants from Queensland (147396, exchange); 1 fern from Peru (144406, exchange); 129 plants, mainly from Mexico and tropical Africa (144531, exchange); 12 plants collected in Mexico by G. B. Hinton (145035, exchange); 1 plant from Peru (145230, exchange).

BROILI, Dr. F. (See under Bayerischen Staatssammlung für Palaeontologie, Historie, Geologie.)

BROOKS, Maj. ALLAN, Okanagan Landing, British Columbia: 1 Vaux's swift (145300, exchange); 3 Thayer's gulls (147380).

BROOKS, A. M., Pittsburg, Kans.: A collection of fossil invertebrates from the Coal Measures at Pittsburg, Kans. (147334).

BROWER, A. E., Bar Harbor, Maine: 2 beetles (145590, exchange).

BROWN, A. W., Arlington, Va.: 2 eggs of the black-headed cacique (148046).

BROWN, WALTER, Laurel, Md.: 1 northern barred owl from Maryland (146602).

BROWN, W. L., Washington, D. C.: 5 small mammals collected in Maryland (148044); 4 feet of a bear from the Dismal Swamp, Va. (148081).

BROWNBACK, H. L., Norristown, Pa.: Anzani aircraft engine, with 10 cylinders, radial air-cooled (148057).

BRUNDAGE, E. J., East Falls Church, Va.: 13 mammals from Ecuador (146312); 3 howler monkeys, 1 night monkey, 1 squirrel (146674); 83 insects from Ecuador (148568).

BRUNER, Dr. S. C. (See under Estacion Experimental Agronomica.)

BUCHANAN, ROBEY, Hawk, N. C.: 2 specimens of oligoclase from Hawk (144403); 4 samples of epidote on feldspar, 1 of smoky quartz from Alexander County, N. C., 5 of oligoclase from Hawk, and 1 lot of uraninites from Spruce Pine, N. C. (145745, exchange).

BUCHER, G. C., Santiago de Cuba: 1 hybrid rodent (alcoholic) (148646).

BUIÉS, C., Quillabamba, Peru: 275 ferns from Peru (127902).

BUNKER, Col. P. D., Fort Mills, Corregidor, Philippine Islands: 83 marine, land, and fresh-water shells from the Philippines (140674).

BURCH, Prof. P. R., East Radford, Va.: 39 mollusks from Virginia (144262).

BURDETTE, Mrs. JOSEPHINE. (See under Dr. Nellis W. Stephenson.)

BURK, ELLEN I., Shabunda, Belgian Congo: Collection of ethnological material from Shabunda, Kivu District, Belgian Congo (144281, collected for the Museum).

BURKENROAD, M. D. (See under Yale University, Peabody Museum of Natural History.)

BURKHARDT, JESSA, Canastota, N. Y.: 2 pouches made by natives of Alaska, 1 fashioned from a flipper of the hair seal, the other decorated with bead-work and an applique panel of feathered bird skin (144404).

BURT, Dr. C. E., Winfield, Kans.: 12 beetle larvae (145550); about 125 shells (145773); a collection of miscellaneous insects (145586, 147101); 19 vials and 145 miscellaneous insects from Southwestern United States (145785, 147017); 35 crabs, about 50 amphipods (145803); a small collection of fossil snail shells from Sweetwater County, Wyo. (147018); 7 turtles and 2 snakes (147444); 17 insects (147509).

BUFFALO MUSEUM OF SCIENCE, Buffalo, N. Y.: (Through Mrs. Imogene C. Robertson) 133 mollusks from western New York, collected by C. L. Blakeslee (145971).

BUSHNELL, D. I., Jr., Washington, D. C.: 175 stone artifacts and potsherds from Westmoreland, Caroline, and King George Counties, Va. (144501); Navaho double-weave saddle blanket, bought in 1898 at Colorado Springs, Colo. (145009); fragments of textiles from the Temple Mound, 5 miles north of Spiro, Le Flore County, Okla. (145859); bronze medal commemorating the centennial anniversary of the establishment of the Southern Railway System, 1830-1930 (147412).

BUSWELL, W. M., Coral Gables, Fla.: 1 fern from Florida (147992).

BUTLER, Dr. C. P., Calama, Chile: 1,200 Jurassic invertebrates from beds 4 kilometers east of Montezuma Observatory, Calama, Chile (144554).

BYRD, Dr. E. E., Athens, Ga.: 7 types of trematodes (146599).

BYXBE, LYMAN, Omaha, Nebr.: 97 prints contained in 50 mats for special exhibition from November 1937 through January 1938 (145930, loan).

CABALLERO y C., Prof. EDUARDO, Mexico, D. F.: 1 type of a new species of nematode (144639); 3 slides of helminths (145231); 7 nematodes, 3 co-types (147978, 148054).

CAHN, Dr. A. R., Norris, Tenn.: 2 small brown bats (146980). (See also under Tennessee Valley Authority.)

CALDWELL, J. S., Circleville, Ohio: 2 paratype insects (147302, exchange).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 284 plants and 1 photograph (142847, 146145, 146644; exchange); (through H. W. Clark) 1 paratype fish from Valparaiso Harbor, Chile (145284), 7 fishes, 4 paratypes, from Silver King Creek, Alpine County, Calif. (145561); (through P. C. Ting) 6 beetles, including 4 paratypes (144619, exchange); (through E. P. Van Duzee) 6 bugs, including 2 paratypes (147214, exchange).

CALIFORNIA DEPARTMENT OF AGRICULTURE, Sacramento, Calif.: (Through H. H. Keifer) 17 Lepidoptera (3 species, 2 paratypes) (144427).

CALIFORNIA DEPARTMENT OF AGRICULTURE, San Francisco, Calif.: (Through P. C. Ting) 10 weevils, including 4 paratypes and 1 topotype (145747).

CALIFORNIA DEPARTMENT OF NATURAL RESOURCES, Division of Fish and Game, Elk Grove, Calif.: 35 Sacramento perch from Clear Lake, Lake County, Calif., and Elk Grove, Calif. (146125).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: (through Dr. G. L. Stebbins, Jr.) 24 plants, mainly from Western United States (147211). *Citrus Experiment Station*, Riverside, Calif.: 20 beetles from South Africa (142572).

CAMARGO, Dr. F. C., Campinas, Brazil: 80 beetles (142385).

CAMERA CLUB, New York City: 58 pictorial prints exhibited during December 1937 (146088, loan).

CAMPBELL, Lt. HERBERT, Washington, D. C.: Plaid shawl in a twill weave of soft gray-and-white wool yarns, period of 1850, owned by Mrs. Peter Campbell, grandmother of the donor (147953).

CANADIAN GOVERNMENT, Ottawa, Canada:

*Department of Agriculture*, Entomological Branch, 1 moth (146413); (through Dr. J. McDunnough) 4 insects (144354); 12 moths, representing 6 species, 4 of which are represented by 8 paratypes (146653, 147039, exchange); (through Dr. C. R. Twinn) 36 flies (17 species, including 14 paratypes of 9 species)

(147413, exchange); (through G. S. Walley) 4 insects, paratypes of 2 species (146677).

*Geological Survey*: 8 Cambrian invertebrate fossils from Keithley Creek Area, Cariboo District, British Columbia (145880); 85 invertebrate fossils from the Devonian of Manitoba, the Mississippian of Nova Scotia, and the Ordovician of Anticosti (146133, exchange).

*National Museum*: (Through A. E. Porsild) 254 plants, mainly from Labrador and Greenland (147939, exchange).

**CANFIELD FUND**, Smithsonian Institution: 3 emeralds from Austria (144486); 1 sample of antimonite and 1 of telluride (144538); 1 plate of gold from Teller, 1 gold nugget from Fairbanks, and 1 gold nugget from Rasmussen, Alaska (144618); 6 rare uranium minerals from near Spruce Pine, N. C. (145427); 1 sample of the mineral lievrite from the Isle of Seriphos, Greece (145988); 12 minerals from Japan (146270); 1 melanite garnet from near Walker, Calaveras County, Calif. (146416); 1 sample of wulfenite (146992); 1 large doubly terminated quartz crystal and 13 small crystals (147041); 1 amethyst from Jefferson County, Mont., and 1 vanadinite from Old Yuma Mine, near Tucson, Ariz. (147088); 1 phosgenite crystal from Montepomi and 1 hauynite and 1 augite crystal from Ariccia (147277); 3 samples of wulfenite from Red Cloud Mine, Yuma County, Ariz. (148555).

**CANTRALL, I. J.** (See under University of Michigan, Museum of Zoology.)

**CAPRON, MRS. ALYN**, New London, Conn.: Flags, medals, sword, and uniform accessories owned by Capt. Allyn Capron and sword owned by Capt. Erastus A. Capron (146711).

**CARDENAS, DR. MARTIN**, La Paz, Bolivia: 56 plants from Bolivia (147491).

**CAREY, CAPT. CHARLES**, Washington, D. C.: 1 sample each of blue and green "Hewe," or wafer bread, prepared from corn by Zuni Indians at Zuni, N. Mex. (146684).

**CARNEGIE INSTITUTION OF WASHINGTON**, Washington, D. C.: 6,201 fishes, 50 marine invertebrates, 1 holothurian, and 2 mollusks collected in the Atlantic and Pacific Oceans by the late Dr. W. H. Longley (144662); cast of a sculptured head from Copan, Honduras, original in the National Museum of Honduras (146595); (through Dr. D. D. Keck) 182 plants,

mainly from Western United States (146066).

**CARPENTER, CAPT. AND MRS. D. N.**, Washington, D. C.: 1 wicker basket from the Bontoc-Igorot, a collection of photographs of the Indians of southeast Alaska, and a chipped stone weapon point from northern Florida (144496).

**CARPENTER, DR. F. M.** (See under Harvard University, Museum of Comparative Zoology.)

**CARR, A. F., JR.**, Gainesville, Fla.: 2 turtles (paratypes) from Florida (148405).

**CARTER, MRS. W. L.**, Lexington, Ky.: 8 mollusks (145030).

**CARTWRIGHT, B. W.**, Deer Lodge, Manitoba: 2 Sprague's pipits (146015).

**CARTWRIGHT, O. L.**, Clemson, S. C.: 34 beetles (145587, 147871, exchange).

**CASTLE, WARREN.** (See under Col. James Hammond.)

**CATHOLIC UNIVERSITY OF AMERICA**, Washington, D. C.: 1 plant from Arizona (147213, exchange).

**CAWSTON, DR. F. G.**, Durban, Natal: 13 mollusks from South Africa (147532).

**CELANESE CORPORATION OF AMERICA**, New York City: 7 samples of Celanese rayon fabrics (147357).

**CHACE, E. P.**, San Pedro, Calif.: 2 sponges, 3 porcellanid crabs, approximately 15 crabs, 7 isopods, 5 amphipods, 2 hermit crabs, some mollusks and echinoderms (146414).

**CHACE, DR. F. A., JR.** (See under Harvard University, Museum of Comparative Zoology.)

**CHAMBERLAIN, PROF. C. J.**, Chicago, Ill.: 1 plant from Mexico (145351); seeds of 18 species of plants (145871); 1 fern from Malaya (146650).

**CHAMBERLAIN, E. B.** (See under Charleston Museum.)

**CHAMBERLAIN FUND, FRANCES LEA**, Smithsonian Institution: The Bohumil Shimek collection of loess fossils and other shells (143363); 1 gem spinel and 1 blue spinel (144560); 197 mollusks (145777); 130 mollusks from the Philippines, (146372); 1 cut gem of sphalerite from Cananea, Mexico (48 carats) (146651); 98 fresh-water mollusks of the original Heude lot (146774); 70 mollusks (146818); 1 green gem sapphire (147942); 95 mollusks (147945); co-types of 265 species of Chinese land and fresh-water mollusks from the Heude collection (148564).

**CHAMBERS, MRS. HELEN GRAVES.** (See under Alice R. Graves.)

**CHAMPION SILLIMANITE, INC.**, Laws, Calif.: 2 specimens of the new mineral woodhouseite and a crystallized

specimen of augelite from California (145386, exchange).

CHARLESTON MUSEUM, Charleston, S. C.: (Through E. B. Chamberlain) 13 insects (12 leafhoppers and 1 beetle) from South Carolina (144416); 3 fly larvae (146794).

CHARLES UNIVERSITY, *Botanical Institute*, Prague, Czechoslovakia: 100 specimens (Century IV) of plants from Czechoslovakia (144603, exchange).

CHASE, Mrs. AGNES, Washington, D. C.: 1 plant from the District of Columbia (145007). (See also under the U. S. Department of Agriculture, Bureau of Plant Industry, and the University of Texas.)

CHEMISCHES INSTITUT DER UNIVERSITAT ROSTOCK, Rostock, Germany: (Through Prof. Ulrich Hofmann) 2 studied clay minerals from Germany (145192).

CHEN, Dr. T. T., Baltimore, Md.: 28 toads from Trinidad and Argentina (145516).

CHERMICK, F. H. and R. L., Pittsburgh, Pa.: 14 species, 65 specimens, of Lepidoptera, including 18 paratypes of 7 species (147891, exchange).

CHERMICK, R. L. (See under F. H. Chermick.)

CHOOA, Dr. Luang, Bangkok, Siam: 1 bottle of *Cladocera* from Siam (148136).

CISSEL, S. C., Washington, D. C.: Carpenter's plow with nine bits, purchased secondhand by the donor in 1881 (147409).

CLARK, A. H., Washington, D. C.: 1 mollusk from the Dismal Swamp near Suffolk, Va. (147419); (with Mrs. Clark) 1 wood tortoise from Virginia (148407).

CLARK, Dr. H. L. (See under Harvard University, Museum of Comparative Zoology.)

CLARK, H. W. (See under California Academy of Sciences.)

CLARKE, J. F. G. (See under Mrs. Florence Blackmore.)

CLAUSE, E. A., Providence, R. I.: 1 book, "The Providence Public Library," by C. E. Sherman (146998).

CLAUSEN, Dr. R. T. (See under Cornell University, Bailey Hortorium.)

CLEMSON AGRICULTURAL COLLEGE, Clemson, S. C.: 4 beetles (142278).

CLENCH, W. J. (See under Harvard University, Museum of Comparative Zoology.)

CLEVELAND, Dr. L. R., Cambridge, Mass.: 152 roaches from Java, Bali, and Ceylon (147418).

CLOKEY, Dr. I. W., South Pasadena, Calif.: 264 plants from the Charleston Mountains, Nev. (144411, 147489; exchange); 292 plants from Nevada (146806, 147305); (through Dr. S. F. Blake) 17 plants from Nevada (145781).

CLOMAN, Mrs. S. A., Washington, D. C.: Mummied hand found in the Valley of the Kings, near Thebes, Egypt, in February 1926 (145928).

CLOUD, P. E., New Haven, Conn.: 2 exhibition specimens of peridotite dikes in Portage shale from Taughannock Falls, N. Y. (145301). (See also under Smithsonian Institution, National Museum.)

COCHRAN, Dr. DORIS M., Washington, D. C.: 1 Brazilian parrot (145253); 1 young skunk and 2 bats from Norbeck and Hyattsville, Md. (145270); 1 Maximilian's parrot (145834).

COCKBURN, Prof. A. M. (See under Grant Institute of Geology.)

COKER, Dr. R. E. (See under University of North Carolina and University of Virginia.)

COLAPINTO, NICOLA, Brockton, Mass.: 25 miniature shoes, about  $3\frac{1}{2}$  inches in length, 10 pairs and 5 single shoes, for men and women, made by the donor (145610).

COLE, Dr. A. C., Nashville, Tenn.: 34 ants (7 species), all paratypes (147085, exchange).

COLE, H. J. (See under J. Fowler.)

COLEGIO DE LA SALLE, Panama, Panama: (Through Prof. Hermano Tarsicio) 21 miscellaneous insects (146126).

COLLIVER, F. S., Melbourne, Victoria: 4 samples of washings with Tertiary Bryozoa from southern Australia (139201, exchange); a collection of Ordovician and Silurian graptolites and Tertiary echinoids, Bryozoa, and brachiopods from Australia (146988, exchange).

COLLOM, Mrs. ROSE E., Payson, Ariz.: 95 plants from Arizona (144488, 144989, 145337, 145762).

COLOM, J. L. (See under Pan American Union.)

COLORADO STATE COLLEGE AND EXPERIMENT STATION, Fort Collins, Colo.: 1 plant from Colorado (145235).

COLUMBIA UNIVERSITY, New York City: (Through Dr. G. M. Kay) 1 skull of a fossil mammal from the Badlands of South Dakota, collected prior to 1853 (147009, exchange).

COMMERCE, U. S. DEPARTMENT OF: *Bureau of Fisheries*: 4,606 fishes and 492 vials of larvae, young eggs, 30 shrimps, 8 crayfishes, 4 turtles, 1 frog, collected in North Carolina,

South Carolina, Florida, West Virginia, Virginia, Georgia, New Jersey, Chesapeake Bay, Massachusetts, Texas, Jamaica, Colombia (144119); 400 marine invertebrates, 65 mollusks, 2 amphibians, and echinoderms (144344); 3 snakes, 1 turtle, 2 salamanders, 8 fishes, part of swim bladder of a fish, and 1 crab (145155, 145524, 146673); 2 tunafishes taken off the coast of New Jersey and 1 hellbender (145565); (through Dr. P. S. Galts-off) 100 crabs (144221); (through Dr. S. F. Hildebrand) 7 fishes (types) collected in Canal Zone and Panama by J. B. Shropshire, Dr. S. F. Hildebrand, and A. O. Foster in 1935 and 1937 (147040); 45 soapfishes from the Canal Zone and Panama, collected by Dr. S. F. Hildebrand, Dr. A. O. Foster, and J. B. Shropshire (147246); (through Dr. Paul R. Needham) 56 vials of amphipods, 3 crayfishes, 6 leeches, 1 oligochaete worm (144292), 278 fishes from the upper Sacramento Drainage, collected in summer and fall of 1937 by A. C. Randle and others (146829); (through Fred Orsinger) 1 fish from the Mississippi River at Lynxville, Wis. (145624), 17 fishes (146641, 146746); (through Fred Orsinger and Dr. H. M. Smith) 3 fishes from Gunston Cove, Potomac River, Md. (146613); (through Dr. L. A. Walford) 1 large tunafish, caught September 20, 1937, by commercial fishermen, probably off the coast of Massachusetts (145366). (See also under Yale University, Bingham Oceanographic Foundation, and R. K. Moore.)

COMMERCIAL MUSEUM, Philadelphia, Pa.: 1 silk nest spun by the gregarious larvae of a moth, enclosing leafy branch of a tree, Coatepec, Veracruz (146608).

COMMERFORD, LEON, Washington, D. C.: 28 badges of the Grand Army of the Republic (145927).

COMISSAO TECNICA DE PISCICULTURA DO NORDESTE DO BRASIL, Pernambuco, Brazil: (Through Dr. Rudolpho von Ihering) 223 fishes, totaling 116 species, from Recife, Pernambuco, Brazil, collected in 1932 by Dr. von Ihering, and 1 jar of mollusks, invertebrates, and echinoderms (125793).

COMSTOCK, Dr. J. A. (See under Los Angeles Museum.)

CONDIT, J. H. (See under Sheldon Jackson Museum.)

CONDON, E. S., Washington, D. C.: 1 stone ax found by the donor about 50 years ago on the Big Sioux, Woodbury County, Iowa (145189).

CONE, J. F. G., Schilling, Calif.: 1 bee nest with bee inside, collected at elevation of 2,000 feet (144581).

COOPER, Dr. G. A., Washington, D. C.: (With Dr. Josiah Bridge) 1,000 invertebrate fossils from the Middle Ordovician (Chazyan) formations of northeastern New York and southern Quebec (145918, collected for the Museum). (See also under Dr. R. S. Bassler, Dr. Josiah Bridge, and Smithsonian Institution, National Museum.)

COOPER, Rev. J. M., Washington, D. C.: 1 lot of eggs of the house sparrow, showing change in pigmentation over a period of years, and 1 bird (146380).

COPELAND, Dr. E. B., Berkeley, Calif.: 85 ferns from the Philippine Islands (145939, exchange).

CORNELIUS, Mrs. C. S., Morro Bay, Calif.: 1 steel engraving of the "Marriage of Pocahontas" (143294). (See also under Mrs. Pearl C. Hull.)

CORNELL UNIVERSITY, Ithaca, N. Y.: *Bailey Hortorium*: (Through Dr. R. T. Clausen) 15 plants from Northeastern United States (146823, exchange).

*New York State College of Agriculture*: (Through Prof. W. C. Muenster) 44 plants, mostly from New York (146267, exchange); (through Prof. J. G. Rempel) 17 flies (3 species) (144874, exchange).

CORPOORAL, J. B., Amsterdam, Netherlands: 1 beetle (138072, exchange).

CORSON, Dr. E. F. (See under Mrs. P. H. Ray.)

COTTAM, Dr. CLARENCE. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)

COTTON-TEXTILE INSTITUTE, INC., New York City: 35 cotton fabrics produced by American manufacturers for the fall and winter of 1937 (145795); 48 cotton textiles produced by American manufacturers for the spring and summer of 1938 (147457).

COWAN, I. M., Victoria, British Columbia: 2 skeletons of the northwestern crow (145572).

CRAIG, Mrs. ALICE W., Oldwick, N. J.: 4 quarter-dollar gold pieces (144770).

CRAIK, Lt. J. D., Washington, D. C.: Blade of baleen (35 inches long) from humpback whale, from Sharks Bay, Western Australia (148090).

CRAMER, Mrs. BLANCHE B., Daytona Beach, Fla.: Rib-weave, red, white, and blue, cotton and wool coverlet in

a modification of "Whig Rose" pattern with "Pine-Tree" border woven by a Mrs. Cramer in 1811 at Uniontown, Stark County, midway between Akron and Canton, Ohio (146381, loan).

**CRAVEN, E. EDITH.** (See under J. H. Craven.)

**CRAVEN, J. H.**, Philadelphia, Pa.: (With E. Edith Craven) Medals and plaques commemorating the centennial celebration of American Independence, Philadelphia, 1876; also peach-stone carvings of Chinese origin and Chinese paintings (146040).

**CREIGHTON, DR. W. S.**, New York City: 22 ants (6 species, including 12 co-types) and 4 additional species represented by specimens from the type series (146813, exchange).

**CRIMLEY, MRS. ELLEN**, Mount Vernon, N. Y.: 1 French music box (146078).

**CROPLEY, R. E.** (See under Mrs. Edith K. Roosevelt and F. J. Owen.)

**CROWLEY, C. A.**, Chicago, Ill.: Insignia of the 13th Engineers, A. E. F. (145411). /

**CURTIS, D. P.**, Sperryville, Va.: (Through T. L. Jackson) 3 millstone picks and an iron dog for holding the log on the carriage of an old up-and-down sawmill (148162).

**DAOCHNOWSKI, DR. A. P.**, Washington, D. C.: 266 plants mainly from Western United States (146272).

**DAMMERS, Comdr. C. M.**, Riverside, Calif.: 175 reared moths, representing 14 species (148094).

**DANFORTH, DR. S. T.**, Mayaguez, Puerto Rico: 141 bones of mammals (144070); 3 mollusks from Saba, Montserrat, and Guadeloupe (146703). (See also under University of Puerto Rico).

**DANIEL Rev. Brother**, Medellin, Colombia: 20 plants from Colombia (144410); 111 miscellaneous insects, comprising almost as many species, from Colombia (145398); 67 plants from Colombia (146081, 147487, exchange).

**DANIEL, DR. F. A.**, Atlanta, Ga.: 6 samples of fluorescent hyalite on Stone Mountain granite from DeKalb County, Ga. (145503).

**DANIEL BOONE BICENTENNIAL COMMISSION**: (Through the Treasury Department, Bureau of the Mint) Daniel Boone commemorative half-dollar struck at the San Francisco mint in 1937 (145913).

**DANISH NATIONAL MUSEUM**, Copenhagen, Denmark: Stone, bronze, and iron-age material from Denmark (78 specimens) (145060, exchange).

**DARBY, DR. H. H.**, New York City: 1 shrimp (147139).

**DARLING, CYRUS**, Westboro, Mass.: 1 dobsonfly (144476).

**DARLING-MCNAB, A. K.**, Philadelphia, Pa.: 1 silver spoon used by Mrs. Israel Washburn (Martha Benjamin, 1792-1861) of Livermore, Maine (146007).

**DARLINGTON, H.**, Casper, Wyo.: 1 sample of bismuthite from Salida, Colo. (145794).

**DA ROCHA, Prof. DIAS**, Ceara, Brazil: 12 insects (Lepidoptera) (146579).

**DAVIS, Prof. E. M.**, Winter Park, Fla.: 43 mollusks from Florida (147474).

**DAVIS, MRS. G. H.**, Kansas City, Mo.: 12 clay concretions (septaria) illustrating their formation, from Johnson County, Kans. (145187).

**DAVIS, N. B.**, Kensington, Md.: Distinguished Service Cross and Citation awarded to the donor while a member of Company I, 28th Infantry, August 14, 1918 (147254).

**DAYTON, W. A.** (See under U. S. Department of Agriculture, Forest Service.)

**DEERE & CO.**, Moline, Ill.: (Through the John Deere Plow Co., Baltimore, Md.) 2 copies of bronze medal commemorating the centennial anniversary of the construction of the first steel plow by John Deere in 1837 (146314).

**DEGENER, OTTO**, Waialua, Hawaii: 143 plants from the Hawaiian Islands (146105, 147526); 140 plants, 1 echinoderm, 17 fishes, 1 isopod, 1 shrimp, 2 crabs, 1 stomatopod (148549).

**DEIGNAN, H. G.**, Washington, D. C.: 1,031 bird skins, 103 bird skeletons, 4 eggs, 1,285 fishes, 86 crustaceans, 5 leeches, approximately 50 earthworms, 100 mollusks, 81 mammals, 95 reptiles and amphibians, 260 insects and 9 mosses, collected by the donor in Siam (144273).

**DE LAUBENFELS, DR. M. W.**, Pasadena, Calif.: 48 lots of sponges, including 9 lots of types, from Panama, collected in 1933 (144980).

**DEMAREE, DR. DELZIE**, Monticello, Ark.: 288 plants from Arkansas, Oklahoma, and Ohio (146435, 146458, 146465, 146577, exchange).

**DENNIS, W. B.**, Castleton, Va.: 2 stone implements from a farm 3 miles west of Castleton Post Office, Rappahannock County, Va. (144381).

**DENTON, DR. J. F.**, Athens, Ga.: 46 mollusks from the vicinity of Athens (147965).

**DE OLIVEIRA, DR. EUZEBIO**, Rio de Janeiro, Brazil: 1 slice of the *Cratheus meteoreite*, Ceara, Brazil (42.5 grams) (147359).

DERK, C. W., Lewistown, Pa.: 2 short sections of leather hose fitted with brass couplings, formerly used by the Henderson Fire Co. No. 1, of Lewistown (146327).

DESCOLE, Dr. H. R. (See under Instituto Miguel Lillo de la Universidad Nacional de Tucuman.)

DEVEREUX, H. M., City Island, N. Y.: 4 prints of a photograph of porpoises, made off Cape Race in July 1931 (148077).

DIAS, Dr. EMMANUEL, Rio de Janeiro, Brazil: 14 insects representing 6 named species (144622, exchange); 8 bats from Mexico (144676).

DIETZ, Mrs. ELIZABETH, Washington, D. C.: 26 mollusks (148563); with Mrs. Marion Lee, 1,008 mollusks collected on Cobbs Island, Md. (144587).

DODGE & OLcott Co., New York City: 33 essential oils and related substances (147169).

DOHRN, Dr. R., Naples, Italy: 4 stomatopods from the Mediterranean (148027).

DOLBEAR, B. L., Belmont, Mass.: 6 items of historic telephone apparatus designed by Amos E. Dolbear, pioneer telephone inventor and father of the donor (145782).

DONISTHORPE, HORACE. (See under British Government, British Museum.)

DONOVAN, T. G., Wellesley, Mass.: 1 sample each of gold and pitchblende with accompanying polished sections and microphotographs (147284).

DOS PASSOS, C. F., Mendham, N. J.: 10 Lepidoptera paratypes (147252).

DOUGALL, Mrs. W. M., Washington, D. C.: Man's wool shawl, 2½ feet wide by 3½ yards long, worn during the 1850's by the donor's grandfather, Rev. James Albert Buck, D. D., rector, until his death in 1897, of St. Paul's Church, Rock Creek Parish, Washington, D. C. (146737).

DOW, Dr. RICHARD, Boston, Mass.: 52 bees (145328).

DRAKE, Dr. C. J., Ames, Iowa: 26 insects, representing 7 named species, all paratypes (138428, exchange). (See also under Iowa State College.)

DRANGA, TED, Honolulu, Hawaii: 6 molusks from Jensen Beach near Miami, Fla. (144372).

DRIGGS, PERRY. (See under Oregon Trail Memorial Association, Inc.)

DROOP & SONS Co., E. F., Washington, D. C.: Swiss music box and table (145956).

DRUSHEL, Prof. J. A., Westfield, N. J.: 102 plants (144642).

DUCHETT, O. D., Hartsville, S. C.: 2 fishes heads (dry) from Hartsville (146795).

DUCKWORTH, A. S., Cape Girardeau, Mo.: 1 crinoid from the Kimmswick limestone of Missouri (144369).

DUGAND, Dr. A. G., Barranquilla, Colombia: 52 plants from Colombia (144320, 145780, 146154, 147944); 17 photographs of Colombian plants (144652); 1 yellow-green vireo (146640); 13 bird skins from Colombia (147014).

DUKE UNIVERSITY, Durham, N. C.: 245 plants from Southeastern United States (146810, exchange); 33 orchids from Southeastern United States (148048); (through Prof. H. L. Blomquist) 1 fern from Mexico (146121).

DUNN, Dr. E. R., Haverford, Pa.: 9 turtles from Panama and Costa Rica (144643).

DUPREY, H. F., Oakland, Calif.: 44 mollusks from Bodega Lagoon, Calif. (145198).

DURYEA, C. E., Philadelphia, Pa.: 1 diamond-shaped kite built and flown by the donor in 1892 (144532).

DURYEA, Mrs. C. E., Philadelphia, Pa.: 1 glass and silver cup awarded to Duryea cars for the Eagle Rock hill climb of 1910 (144429).

DUTILLY, Father ARTHÈME, Washington, D. C.: Collection of artifacts of the Iglulik Eskimos, Hudson Bay region (147168).

DUVAL, MARIAH P., University, Va.: Excellent example of early grass pile cloth from the Congo, West Africa (143959).

EBERHARD FABER PENCIL Co., Brooklyn, N. Y.: 3 original drawings: 1 in pencil, 1 in "Nupastel," and 1 in Mongol colored pencils (145502).

ÉCOLE DE AGRICULTURE, Ste. Anne, Quebec: (Through Rev. Brother Firmin) 9 insects (146760).

EDGERTON, J. C., Washington, D. C.: A collection of original records kept by the donor during his service as an airmail pilot on the route between New York, Philadelphia, and Washington in 1918 (148531, loan).

EDWARDS, W. H., Kingston, Jamaica, British West Indies: 6 beetle larvae from Jamaica (146329); 2 beetle larvae from Barbados (147012).

EHLERS, Prof. G. M. (See under University of Michigan, Museum of Zoology.)

ELIAS, M. K., Urbana, Ill.: 10 ferns from Colombia (148295, exchange).

ELIAS, Rev. Brother, Barranquilla, Colombia: 71 plants from Colombia (145160, 146646).

ELLIOTT, J. M., Miami, Fla.: 4 conch-shell celts found while excavating a slipway on the Miami River (144386).

ELMORE, G. S., Washington, D. C.: 1 pharyngeal bone and teeth of a drum-fish collected by donor near Wheatland, Wyo. (144552); (through Dr. A. Hrdlička) 1 Jivaro Indian shrunken head (146313).

EMMERSON, M. E., Washington, D. C.: Trick canteen of Irish majolica and trick teapot of English Copeland ware (145530); 1 birch bark tray, quill-work decoration (145748); 2 18th-century Venetian blown-glass vases and 3 pieces of old English enameled and lustre glass (147036).

ENGLISH, P. H. (See under New Haven Clock Co.)

EPSTEIN, Dr. SIGMUND, New York City: A collection of 105 photographic prints from an exhibit, by the donor, entitled "The Crutch in Art Through Forty Centuries" (148093).

ERLANSO, C. O. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

ESTACION EXPERIMENTAL AGRONOMICA, Santiago de las Vegas, Cuba: (Through Dr. S. C. Bruner) 60 beetles, 59 of which were collected by L. C. Scaramuzza in South America (146581); (through L. C. Scaramuzza) 19 insects from Cuba (144101).

EVANS, CLIFF, Washington, D. C.: 1 shark (145372).

EVANS, Mrs. EMMA W., Alexandria, Va.: A silver spoon with a handle representing the winged wand of Mercury, called the Caduceus, the symbol of the medical profession (146009).

EVANS, LUCRETIA E., Lynn, Mass.: 1 carved ebony Chinese chair (146207, bequest).

EVENING PUBLIC LEDGER, Philadelphia, Pa.: A collection of photographs illustrating the departure of airmail from Philadelphia on the inaugural date for scheduled airmail service, May 15, 1918 (148537).

EVERETT, Sgt. HOWARD, Corozal, Canal Zone: 1 lanternfly (145511).

EWAN, JOSEPH, Boulder, Colo.: 20 plants from Western United States (148425, exchange).

EWING, Dr. H. E., Washington, D. C.: 7 amphibians from Maryland (148412).

EYER, Dr. J. R. (See under New Mexico State College.)

EZRA, A., Cobham, Surrey, England: 1 pink-headed duck (148572).

FAIRCHILD, Dr. G. B., Cambridge, Mass.: 40 flies, representing 25 species of which 18 species and 3 genera are new to our named collection (146067). (See also under Harvard University, Museum of Comparative Zoology.)

FARNELL, W. C. F. (See under Bell Telephone Laboratories, Inc.)

FASSEBENDER, ADOLF, New York City: 40 gravure prints of the donor's work in a portfolio entitled "Pictorial Artistry" (146001).

FAUNTLEROY, ANNE M., Washington, D. C.: Silk dress worn by Miss Katherine Brooke, of Middleburg, Va., on the occasion of her marriage in 1792, and a shoe buckle worn during the War of the Revolution by Lt. Col. Levin Powell of the Continental Army (146128).

FAUROTE, FAY L., New York City: A collection of aeronautical data, largely related to the inventions, flights, and manufacture of aircraft by Glenn Hammond Curtiss (146293).

FAWCETT, C. L., Tucuman, Argentina: 2 plants from Argentina (148406).

FEDERACION NACIONAL DE CAFETEROS DE COLOMBIA, Esperanza, Colombia: A small collection of scale insects from Colombia (139888); (through R. P. Robá) 55 insects (48 species) from Colombia (135548); 3 small collections of miscellaneous insects from Colombia (136715, 138680, 144306); a collection of insects, including 3 bottles of an ant species, females, males, and workers, (145640); 123 miscellaneous insects (147039, 147209).

FERLIPONE, Dr. FLORENTINO, Montevideo, Uruguay: 15 mollusks, 6 starfishes, 9 hippas, and 5 shrimps from Uruguay (137120).

FELT, Dr. E. P., Stamford, Conn.: 3 female flies (145750).

FERGUSON, Mrs. ALICE L. L., Accokeek, Md.: 1 bone of the trumpeter swan from an Indian burial near Accokeek, Prince Georges County, Md. (144289); skeletal remains from ossuary No. 1, located on the Ferguson Farm (Hard Bargain), Accokeek, Prince Georges County, Md. (145743).

FIDUCIA, C. S., New Orleans, La.: 2 insects collected near Covington, La. (144505).

FIELD MUSEUM OF NATURAL HISTORY, Chicago, Ill.: 17 salamanders (including paratypes of 6 new species) from Guatemala and Honduras (1455525, exchange); 13 small mammals (145637, exchange); 1 plant from Mexico (145779, exchange); 661 photographs of types of American plants in European herbaria

(145941, exchange); 478 study specimens of Peruvian woods collected with botanical material by Llewelyn Williams, during 1929-30 (146036, exchange); 5 fishes (146058, exchange); 625 plants from tropical America, mainly Mexico (146122, exchange); 3 ferns from Costa Rica (146592, exchange); 3 fragmentary ferns from Mexico (146822, exchange); 228 photographs of type plants from European herbaria (147393, exchange); skin and skull of South African hedgehog collected at De Wildt, Transvaal, February 14, 1927 (148020, exchange).

**FIELDS, MRS. MARIE.** (See under Pauline Fields.)

**FIELDS, PAULINE**, Baltimore, Md.: (Through Mrs. Marie Fields) 1 music box and animated costumed china doll, period of 1880-90, in a glass case, Swiss. Repertoire: Les Cent. Dierge, and Valse (148207).

**FILENE, Estate of EDWARD A.**: (Through Lillian Schoedler) 10 War Service Shipbuilding badges and buttons of the period of the World War (146048).

**FINLAY, DR. H. J.**, Wellington, New Zealand: 116 Turritidae from New Zealand (138572, exchange).

**FIRMIN, Rev. Brother.** (See under École de Agriculture, Ste. Anne.)

**FISHER, G. L.**, Houston, Tex.: 171 plants from Mexico and Texas (145522); 22 plants from Texas (146618); 21 plants from Mexico (146675, exchange).

**FISHER, G. M.**, New York City: (Through Fogg Art Museum, Cambridge, Mass.) 38 pieces of Japanese pottery and porcelain and 1 inscribed wooden coaster and 30 samples of Japanese printed fabrics (144330).

**FISHER, W. S.** (See under J. L. Gressitt.)

**FITZ, H. G.**, Peconic, N. Y.: 30 specimens of photographic material (109990).

**FLANNERY, MRS. J. P.**, Baltimore, Md.: 2 bordered appliqued quilts made between 1866 and 1870 by the lender's aunt, Lizzie Lisle (Mrs. Eden Randall), of Cadiz, Ohio (144535, loan).

**FLAVELLE, MRS. WINIFRED**, Washington, D. C.: A collection of invertebrate fossils from the Chemung formation at Wellsville, N. Y. (145299). (See also under R. D. Richards.)

**FLEMING, R. S.**, Greenville, N. C.: 9 crayfishes from Reelfoot Lake, Tenn. (145177).

**FLORIDA BOTANICAL GARDEN**, Sebring, Fla.: (Through J. B. McFarlin) 21 ferns (147098).

**FLORIDA REPTILE INSTITUTE**, Silver Spring, Fla.: (Through E. R. Allen) 6 crabs and 2 shrimps (144640).

**FLORIDA, UNIVERSITY OF**, Gainesville, Fla.: 3 leaf-tying moths (145510); (through A. N. Tissot) a small collection of moths from Florida (144491).

**Agricultural Experiment Station**: (Through Erdman West) 11 ferns from Costa Rica (147201).

**FOGERTY, CAPT. BAT**, Bradenton, Fla.: 4 half models of Florida watercraft designed and built by the donor (148524).

**FOGG ART MUSEUM.** (See under G. M. Fisher.)

**FORCE, EDITH R.**, Tulsa, Okla.: 9 beetles (144462); 250 mollusks from the vicinity of Tulsa, Okla. (144507).

**FORT HAYS KANSAS STATE COLLEGE**, Hays, Kans.: 100 plants from Kansas (147943, exchange).

**FOSTER, DR. A. O.**, Ancon, Canal Zone: 124 crustaceans (143869).

**FOWLER, J., and H. J. COLE**, Washington, D. C.: A collection of reptiles and amphibians from Maine and Vermont (145321).

**FRANCLEMENT, J. G.**, Ithaca, N. Y.: 28 Lepidoptera (147362).

**FRANCO, COARACY DE MORAES.** (See under Instituto Agronomico do Estado de São Paulo.)

**FRANCO, ERNESTO.** (See under Rafael Requena.)

**FRANKLIN-GULF-LIBERTY-CALHOUN HEALTH DEPARTMENT**, Apalachicola, Fla.: 1 insect (144996).

**FRASER, A. D. R.** (See under Windsor-Walkerville Vocational School.)

**FRASER, MRS. GEORGE**, Washington, D. C.: Cast-iron hitching post (148569).

**FRAYSER, MRS. B. H.**, Norfolk, Va.: Collection of Navaho blankets, pottery, baskets, and other ethnological material from Pueblo, Navaho, and other Indian tribes, and 2 stone axes (145422).

**FREEMAN, AVERY**, Dallas, Tex.: 2 moths (146344); 6 lepidopterous insects (6 species) (146622).

**FROST, C. A.**, Framingham, Mass.: 32 insects (138469); 57 miscellaneous insects (145625); 204 beetles, 54 of which are in alcohol, the others pinned (146685).

**FULLER, MRS. FRAZEE**, Bradford, Pa.: 1 dobsonfly from Pennsylvania (144614).

**FULLER, LEO H., INC.**, Long Island City, N. Y.: 1 print in silk-screen process, "The Gay Caballero," after a painting by C. E. Millard (145628); 1 silk-screen print in water color, entitled "Zuni Indian," by Jay Weaver (146551).

GALLEGOS, Dr. F. L., Medellin, Colombia: 100 miscellaneous insects from Colombia (143094); 32 Lepidoptera (32 species) from Colombia (144347).

GALLOWAY, J. C., Port Allegany, Pa.: Skin and skull of a rat (145016).

GALOPIN, Dr. RAYMOND. (See under Muséum d'Histoire Naturelle.)

GALTSTOFF, Dr. P. S. (See under U. S. Department of Commerce, Bureau of Fisheries.)

GALVIN, W. M., Jr., and ELLEN, Chevy Chase, Md.: 1 hognose snake from Sugar Loaf Mountain, Montgomery County, Md. (145322).

GARBER, P. E., Washington, D. C.: British military sword of the period of the American Revolution (145831, loan).

GARDNER, Dr. JULIA A., Washington, D. C.: 188 mollusks from Tiflis, Georgia, U. S. S. R., and 3 sea urchins (145746); about 500 Devonian invertebrate fossils from the Island of Novaya Zemlya (145860).

GARRETT, A. O., Salt Lake City, Utah: 1 plant from Utah (145338).

GARRISON, C. W. (See under Hayes Memorial Library.)

GATES, Rev. SEBASTIAN, Grenada, British West Indies: 13 fleas and other insects (146780).

GAWTHROP, A. H. (See under American Car & Foundry Co.)

GEISER, Prof. S. W., Dallas, Tex.: 1 vial of ticks collected on dogs in Texas (145615).

GENTRY, H. S., Tucson, Ariz.: 20 plants from Mexico (145032).

GEORGIA, UNIVERSITY OF, Athens, Ga.: 17 plants from Georgia and Florida (146012, exchange); (through Prof. Rogers McVaugh) 98 plants, mainly from Georgia (146097); 1 plant from Georgia (147060, exchange).

GHENT, UNIVERSITY OF, Ghent, Belgium: (Through Dr. A. L. Hacquaert) 14 miscellaneous invertebrate fossils from Belgium (133411, exchange).

GINELLA, Prof. V. P., Reno, Nev.: 3 samples of piedmontite and 1 of cinnabar, all from Nevada (145653).

GILLETTE, Hon. GUY M., Washington, D. C.: 3 mollusks collected by Mrs. H. C. Alexander in Oahu, Hawaii, in 1932 (146411).

GILMORE, C. W. (See under Smithsonian Institution, National Museum.)

GIMBEL, E. A., Philadelphia, Pa.: Gilt replica of medal presented to Amelia Earhart on the occasion of a banquet given in her honor by the firm of Gimbel Brothers in 1932 (146309).

GLASS, JEWELL J., Washington, D. C.: 5 samples of triphyllite from Amelia, Va., and 2 samples of studied inesite (145963).

GLASSELL, S. A., Beverly Hills, Calif.: 5 hermit crabs, all paratypes of new species (146412).

GLEASON, P. R., Central, N. Mex.: 18 Lepidoptera (2 species) (148043).

GLEAVES, Mrs. ALBERT, Annapolis, Md.: Pastel portrait of Admiral Albert Gleaves, U. S. N., by Jessie Steele Brown (145922).

GLENDINNING, ALEX, Washington, D. C.: 1 shark (14574).

GOOCH, FREDERICK, Washington, D. C.: 1 Motiograph motion-picture head, No. 1 model, 1908 (147187); 1 Edison Kinetoscope motion-picture head (1908 Underwriters Model) (147537); 1 Powers Cameragraph head, No. 5, 1904, with projection lens (148290).

GOODING, L. M., Albuquerque, N. Mex.: 65 plants from Arizona and New Mexico (145375, 147186, 147946, 148550).

GOODWIN, W. D., Tulsa, Okla.: 1 pair of Indian lacrosse ball rackets made by the Muskogee Creek Indian, Goliah Jones (147886).

GORDON, Dr. ISABELLA. (See under British Government, British Museum.)

GORDON, LINDELL, Jr., St. Louis, Mo.: 1 oval milling-stone found near Delsingano mining camp, 35 miles west of the Bay of Los Angeles, Baja California (144428).

GOTTSCHALK, C. W., Salem, Va.: 1 insect (145622).

GOVERNMENT PRINTING OFFICE, U. S., Washington, D. C.: 321 graphic-arts specimens (148539).

GRAHAM, Dr. D. C., Chengtu, Szechwan, China: 165 bird skins, 2 small mammals, 3 mammals with no skulls, and 10,000 insects from China (146621, 147351).

GRAHAM, Judge W. J., Washington, D. C.: Human skeletal material from 3 ossuaries near Potomac Creek, Stafford County, Va. (144975).

GRANT, Dr. ADELE L., Los Angeles, Calif.: 33 plants from South Africa (147059).

GRANT INSTITUTE OF GEOLOGY, Edinburgh, Scotland: (Through Prof. A. M. Cockburn) 46 minerals from Scotland and other European localities (148556, exchange).

GRAVES, ALICE R., and MRS. HELEN GRAVES CHAMBERS, Fayetteville, N. Y.: Drum with sticks and crepe used by Maurice A. Graves, Company I, 10th Regiment, Veterans Reserve Corps, on the occasion of the funeral of President Abraham Lincoln in 1865 (147790).

GREATER TEXAS AND PAN AMERICAN EXPOSITION, U. S. Commission, Dallas, Tex.: Nearly complete tail of dinosaur in the rock, and the tail, pelvis,

and hind limbs of a crested hadrosaurian dinosaur (146086).

GREENLEY, Dr. J. R. (See under New York Conservation Department.)

GREEN, Dr. JULIA M., Washington, D. C.: Paisley shawl 61 inches wide by 136 inches long, owned by Julian Lincoln Green, Malden, Mass., mother of the donor (148535).

GREEN, N. B., Elkins, W. Va.: 4 salamanders from Barton Knob, W. Va. (144580).

GREGORY, Dr. W. K. (See under American Museum of Natural History.)

GRESSITT, Jr., Berkeley, Calif.: (Through W. S. Fisher) 19 beetles, all holotypes of new species from China (144448).

GRIM, Dr. R. E., Urbana, Ill.: Sample of the type material of the mineral illite (146089).

GROSJEAN, Mrs. R. O., Fort Wayne, Ind.: Skull, tail, fore, and hind foot of a shrew (145771).

GROSVENOR, Dr. GILBERT, Washington, D. C.: 21 butterflies from Japan (145330).

GROUT, Dr. A. J., Manatee, Fla.: 1 plant from Michigan (146146); 2 plants from Florida (146712, 146808, exchanges).

GUBLER, JEAN, Rabat, Morocco: 138 invertebrate fossils from the Jurassic and Silurian deposits of Morocco (116430, exchange).

GULICK, Mrs. VIRGINIA, Washington, D. C.: Daguerreotype of Galusha Grow, Speaker of the House of Representatives, 1861-1863 (145647).

GUNNELL, L. C., Alexandria, Va.: 1 skin and skull of a skunk collected in Virginia (148088).

GUNTER, GORDON, Palacios, Tex.: 1 shrimp (147244).

HACQUAERT, Dr. A. L. (See under University of Ghent.)

HAFFERMAN, JOHN, Washington, D. C.: 1 cranium of "gurnard" taken on the beach at Cape Henry, Va. (144612).

HAGEN, Mrs. LIBBY L., Washington, D. C.: Seamless white-and-blue, cotton-and-wool, single-weave, Jacquard type coverlet, 90 inches by 76 inches, hand-woven in Pennsylvania for a grandmother of the lender, Mrs. Simon Wagner, Monaca, Beaver County, Pa. (146997, loan).

HAMBLETON, Dr. E. J., Campinas, São Paulo, Brazil: 12 weevils (6 males and 6 females), all paratypes, from Brazil (146077).

HAMMERMILL PAPER Co., Erie, Pa.: 7 photographs illustrating the manufacture and use of sulphite wood pulp for writing papers (146016).

HAMMOND, Col. JAMES, Germantown, Tenn.: (Through Warren Castle) 1 skeleton and 2 trunks of the imperial woodpecker (145499).

HANCOCK, Capt. G. ALLAN, Los Angeles, Calif.; Prof. F. G. MESERVE, St. Paul, Minn.; and Dr. H. W. MANTER, Lincoln, Nebr.: 20 types and 1 paratype of ectoparasitic trematodes (147892).

HANCOCK PACIFIC EXPEDITIONS, Los Angeles, Calif.: 15 fishes and 2,000 marine invertebrates taken in the Gulf of California in the spring of 1937 (144492).

HANSEN, Capt. H., Fort Myers, Fla.: Half model of the stern wheel river steamer *Uneeda* (148527).

HANSTRÖM, Dr. BERTIL. (See under Zoologiska Institutionen.)

HARDY, D. E., Hooper, Utah: 3 flies (allotype and 2 paratypes) (144845). (See also under Utah State Agricultural College.)

HARDY, F. W. (See under Leeds Modern School.)

HARNER, JOE, Nevada, Mo.: 1 large skink from Missouri (144561); 86 fossil plants from the Cherokee shale near Nevada, Mo. (145754).

HARNSBERGER, R. C. (See under Luray Caverns Corporation.)

HARPER, Dr. R. M., University, Ala.: 42 plants, mostly from Alabama (144666); 15 plants from Alabama (145978).

HARRINGTON, Prof. H. D., Fort Collins, Colo.: 2 plants from Colorado (145962).

HARRINGTON, JOHN, Richmond, Va.: 2 skulls (1 with lower jaw) and an extra lower jaw from a mound near Saltville, Smith County, Va. (146394).

HARRIS, Dean B. B., Denton, Tex.: 30 plants from Western United States (120860).

HARRIS, WRAY, Luma, Samoa: Paratypes of 3 species of mollusks from Samoa (148440).

HARRISON, BERTRAND. (See under Brigham Young University.)

HARRISON, CHARLES, Seattle, Wash.: 2 plants (fungi) (147562).

HARRISON, W. H., Indianapolis, Ind.: Iron chest from San Cristobal Castle, San Juan, Puerto Rico (145882).

HARTER, MARY, Bloomfield, N. J.: (Through Mrs. O. G. Schaefer) 1 wrought-iron spider (cooking pot) bought by Mrs. Sally J. Kintz in Somerset, Perry County, Ohio, about 1818 (147603).

HARTMAN, Dr. OLGA, Los Angeles, Calif.: 1 crab, 1 hydroid, 1 isopod, 10 bryozoans, 50 amphipods, and 1 fish from Fords Beach, Chesapeake Bay, Md.

(145255); 390 amphipods, 100 isopods, 25 crabs, 7 hermit crabs, 4 shrimps, 2 cumaceans, 10 marine worms, 21 pycnogonids, and 50 mysids (145389, 147078, 147906); 800 marine invertebrates, some echinoderms, 6 fishes, and a collection of flatworms from Englewood, Fla. (146660); a small collection of Crustacea from Scripps Institution (147231).

**HARVARD UNIVERSITY**, Cambridge, Mass.:

*Gray Herbarium*: 361 North American plants (144414, 148016, exchange); 759 plants from Virginia and Kentucky (145588, 145845, 148011, exchange); 136 photographs of ferns in European herbaria, mostly type specimens (145940, 146011, 146433, 146801, exchange); 1 photograph of a fern from the Berlin herbarium (145964, exchange); 1 plant from Costa Rica (146037, exchange); 9 ferns from Bolivia and Argentina (147392, 147949, exchange); 295 plants from eastern Canada and Newfoundland (147938, exchange).

*Department of Mineralogy*: 3 samples of leightonite from South America (147065, exchange); (through Dr. C. S. Hurlbut) 1 sample each of aminoflite, ferroschallite, and hilgardite (146003, exchange).

*Museum of Comparative Zoology*: 3 mallard ducks (147194); 2 green-winged teals (147888); (through Prof. Nathan Banks) 22 flies, comprising adults, larvae, and pupae of 4 species, all new to the collection (146031, exchange); 1 insect (146064, exchange); (through Dr. Thomas Barbour) 2 frogs (145517, exchange); (through Dr. F. M. Carpenter) 1 insect (146867, exchange); (through Dr. F. A. Chace, Jr.) 39 crustaceans (147000, exchange); (through Dr. H. L. Clark) a collection of small crustacea comprising copepods and Cladocera returned to the Museum of Comparative Zoology after the death of G. O. Sars (110748); (through W. J. Clench) 37 land shells (topotypes of 4 species) (147011, exchange); foraminiferal sand from Puerto Plata, Dominican Republic (147192); (through Dr. G. B. Fairchild) 46 flies (19 species of Tabanidae) (146463, exchange); (through Dr. P. E. Raymond) 376 brachiopods from the Carboniferous and Mesozoic formations of Europe (148167, exchange).

**HASBROUCK**, Dr. E. M., Washington, D. C.: 1 shoveler and 2 blue-winged teals (145428); 5 ducks (145849); 1 buffle-

head (145916); 13 ducks (146736); 4 birds (148082).

**HATAI**, Dr. KOTORA, Sendai, Japan: 9 brachiopods, 6 species, 5 of which are recent and 1 fossil, from Japan (148160, exchange).

**HATHAWAY**, E. S., New Orleans, La.: 152 shrimps from Louisiana (146373).

**HAUGHT**, Dr. OSCAR, Littleton, W. Va.: 1,380 plants and 33 shells from Colombia (147478).

**HAWAIIAN SUGAR PLANTERS' ASSOCIATION**, Honolulu, Hawaii: (Through O. H. Swezey) 225 ants (19 species), all from the Island of Guam (147568); 12 mosquitoes (147960).

**HAYES MEMORIAL LIBRARY, TRUSTEES OF THE**, Fremont, Ohio: (Through C. W. Garrison) 1 gold mourning ring containing a lock of the hair of George Washington (146245, loan).

**HAYNES, CAROLINE C.**, Highlands, N. J.: 37 plants from Washington (145225); 700 mosses and Hepaticae, issued as exsiccatae by Dr. Fr. Verdoorn (146296); 50 mosses (146648).

**HAYWARD, WYNNDHAM**, Winter Park, Fla.: 7 plants from Florida (144504); 4 cultivated plants (147189).

**HEATH**, E. S., Atlanta, Ga.: 1 cultivated plant from Georgia (145644).

**HEERLEIN**, C. A., Goldfield, Nev.: 1 sample of ilsemannite from Sorensel Face Moby Mine, Esmeralda County, Nev. (146330).

**HEGEMAN, ANNIE-MAY**, New York City: Archeological and historical objects, being part of the collection of Mrs. H. K. Porter, presented by her daughter (147093); 11 weavings and embroideries from Kashmir, India, and France; 2 Japanese ivory sheathed daggers; 1 pair of English dueling pistols in leather holster; 1 Turkish sword in silver mounted scabbard; and 1 silver plate plaque, Syrian (148092, loan).

**HEIGHWAY**, Dr. A. E., Washington, D. C.: 1 crystal of columbite from Greenville County, S. C. (145401); 1 sample of talc from Laichowfu Mountains, Shantung Province, China (148086).

**HENDERSON, E. P.** (See under Smithsonian Institution, National Museum.)

**HENDERSON, H. E.**, Stillwater, Okla.: 12 mollusks and 21 crayfishes from Oklahoma (144365); (through R. C. Hughes) 4 slides of parasites (145593).

**HENDERSON, W. J.** (See under Dr. Ambrose Swasey.)

**HERDE, K. E.**, Stillwater, Okla.: 13 copepods (144299, 144328).

HERMANN, F. J., Ann Arbor, Mich.: 1 plant from Michigan (144517); 156 plants (146825); 1 plant from Utah (147172).

HERON, Mrs. LULU, Bethel, Alaska: (Through Dr. Aleš Hrdlička) 6 archaeological implements from the Lower Kuskokwim River, Alaska, and 10 modern Eskimo ivory figurines from Nelson Island, Alaska (146017).

HERRIN, CARL, Portland, Oreg. (Through A. G. Simson) 1 polished exhibition slab of fossil wood showing processes of decay before petrifaction (144468).

HESS, F. L., College Park, Md.: 5 telluride gold ore specimens from Colorado and 1 tungsten ore specimen from Tanganyika Territory, Africa (144556); 1 sample of thorianite from Balangoda, Ceylon, and 1 of calaverrite from Crescent Mine, Cripple Creek, Colo. (147893); samples of pyrophyllite and lazulite from 4 miles west of Staley, N. C. (148165).

HIBARD, R. R., Buffalo, N. Y.: 20 blastoids and crinoids from the Hamilton shale at Bay View, N. Y. (145144); a collection of Devonian (Portage) conodonts from near Clarksburg, N. Y. (147898, exchange); a collection of Silurian and Devonian crinoids and cystids from New York (148159).

HIDORE, JOHN, Rockford, Iowa: 150 Upper Devonian invertebrate fossils from the Hackberry formation of Iowa (144348).

HIGHWAY ENGINEERING AND CONSTRUCTION Co., INC., Gettysburg, Pa.: (Through J. L. Thomas) 3 slabs of Triassic footprints from Throstles Quarry near York Springs, Adams County, Pa. (145268).

HILDEBRAND, DR. S. F. (See under U. S. Department of Commerce, Bureau of Fisheries.)

HILL, DR. D. S., Washington, D. C.: 1 walking stick presented to Henry Clay about 1830 by his son, Henry Clay, Jr., when a cadet at the U. S. Military Academy at West Point, N. Y. (146382, loan).

HIMES, J. H., Washington, D. C.: A collection of flutes, oriental battle axes, English, American, and Chinese ceramics and cloissone, decorated ivory box, and an Apulian amphora (146566).

HIMMELHEBER, C. M., Washington, D. C.: 1 pair of pipe tongs with the long jaw and handle adjustable on the pivot (148544).

HINE, LELA M., Norfolk, Va.: 1 silver portrait medalet of George Washington, designed by Anthony Paquet (148432).

HINTON, S. D., Riverdale, Md.: 3 frogs (145360).

HOBBS, H. H., Jr., Gainesville, Fla.: About 100 isopods (144037); 3 crayfishes (holotype, allotype, and paratype of a new species from Florida) and about 10 shrimps from Cuba (145734).

HODGE, DR. W. H., Amherst, Mass.: 4 land mollusks from the Island of Dominica (145872).

HOEN, A. B., Baltimore, Md.: 1 skull of porpoise (146090).

HOFFMAN, Prof. W. A., San Juan, Puerto Rico: About 15 ostracods, 2 beetles, and some algae (146593).

HOFMANN, Prof. ULRICH. (See under Chemisches Institut der Universität Rostock.)

HOGUE, O. D., South Duxbury, Mass.: Field glass captured from a Confederate officer at the Battle of Champion Hills, Miss., in 1863 by James G. Hogue, 26th Ohio Independent Battery (144668).

HOLLEMAN, DR. W. (See under Netherlands Indies, Mining and Geological Survey Department.)

HOLLETT, MRS. G. L., Guam, Marianas Islands: 24 plants from Guam (146611).

HOLLISTER, GLORIA. (See under New York Zoological Society.)

HOLMES, R. M., JR. (See under Ella F. Larkin.)

HOLT, E. H. (See under American Automatic Electric Sales Co.)

HOPKINS, J. L., & Co., New York City: 5 drugs for the *materia medica* collection (147896).

HOPKINS MARINE STATION, Pacific Grove, Calif.: (Through Dr. R. L. Bolin) 10 fishes and 7 crustaceans from California (144382).

HORA, DR. S. L. (See under Indian Museum.)

HORESCO, T. G., Freeport, N. Y.: Several specimens of pegmatite granite from Long Island City, N. Y. (147269).

HORTON, F. W., Washington, D. C.: 1 lot of gummite, clarkeite, and uraninite samples from Pink Mine, Fanny Gouge, Spruce Pine, N. C. (146395, exchange). (See also under C. E. Julihn.)

HOSTETTER, D. R., Harrisonburg, Va.: A collection of miscellaneous insects taken on the Carolina junco or the nest (145279).

HOTCHKISS, NEIL. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)

HOWE, ELIVRA E., New York City: Small bone-handled 2-bladed penknife made by the Empire Co. about 1870 and a pair of spectacles (147589).

HOWELL, A. H., Washington, D. C.: 4 plants (148551).

HOWELL, Prof. B. F., Princeton, N. J.: 12 invertebrate fossils from the Middle Cambrian beds of Vermont (148573).

HRDLÍČKA, Dr. ALEŠ, Washington, D. C.: 1 human skull (no lower jaw) and a nearly complete male skeleton (with skull) from Hooper Bay, Alaska, collected by Father Fox, (145934); cribbage board of carved ivory, Eskimo, Alaska, from Nelson Island or vicinity (146610); 2 skulls and a lower jaw of Eskimos from Hooper Bay, Alaska (147256). (See also under G. S. Elmore, Mrs. Lulu Heron, J. E. Standley, and Smithsonian Institution, National Museum.)

HUBBS, Dr. C. L., Ann Arbor, Mich.: 10 crayfishes (144985, exchange). (See also under University of Michigan, Museum of Zoology, and Tennessee Valley Authority.)

HUBRICHT, LESLIE, St. Louis, Mo.: 33 isopods and 20 amphipods, including cotypes of 5 new species of isopods and 1 new species of amphipod (145424); approximately 150 amphipods, including cotypes of 1 new species and approximately 94 isopods, including cotypes of 2 new species (147529).

HUESTIS, ROBERT, Washington, D. C.: 100 mollusks (148543).

HUGHES, Prof. R. C., Stillwater, Okla.: 7 mollusks, from Boomer Creek, Stillwater (148084). (See also under H. E. Henderson.)

HULL, Mrs. PEARL C., Morro Bay, Calif.: (Through Mrs. C. S. Cornelius) Quaker wedding gown worn by Phoebe Cornelius at Raisin Valley, Mich., in 1874 (144406).

HUNNEWELL, F. W., Wellesley, Mass.: 1 fern from western Guatemala (145-958).

HUNT, ESTHER, Baltimore, Md.: 1 framed ambrotype of 1856 (144404).

HUNT, Dr. G. R., Fairmont, W. Va.: 63 mollusks from West Virginia, including type and paratype of 1 species (140570).

HURLBURTT, Dr. C. S. (See under Harvard University, Department of Mineralogy.)

ILLINOIS DEPARTMENT OF AGRICULTURE, Chicago, Ill.: (Through J. K. Karlovic) A small collection of scale insects on bark of poplar tree (144664).

ILLINOIS STATE NATURAL HISTORY SURVEY, Urbana, Ill.: 5 Hymenoptera (3 species) (147407, exchange).

INDIA, GEOLOGICAL SURVEY OF, Calcutta, India: 6 meteorites from India (Chandakopur, Futtahpur, Moti-ka-nagla, Shytal, Dandapur, Bishunpur) (146425, exchange); 23 meteorites from India (145521, exchange).

INDIAN MUSEUM, Calcutta, India: (Through Dr. H. M. Smith) 1 catfish from Maltipur, Hooghly River, India (145368); (through S. L. Hora and H. M. Smith) 4 fishes (147423).

INSTITUTO AGRONÓMICO DO ESTADO DE SÃO PAULO, Campinas, Brazil: (Through Coaracy de Moraes Franco) 281 plants from Brazil (145245, 147185, exchange).

INSTITUTO DE BIOLOGIA VEGETAL, Rio de Janeiro, Brazil: 104 plants from Amazonian Brazil (146800, exchange); 139 Amazonian plants (147353, exchange).

INSTITUTO MIGUEL LILLO DE LA UNIVERSIDAD NACIONAL DE TUCUMÁN, Tucuman, Argentina: (Through Dr. H. R. Descole) 179 plants, mainly from Argentina (148418, 148419, exchange).

INTERIOR, U. S. DEPARTMENT OF THE: Geological Survey: A suit of 80 rock samples from the Baker Quadrangle and adjacent areas, Oregon, described by Dr. James Gilluly (144470); 230 fossil plants described by Dr. R. W. Brown (144540); 39 specimens and casts of gastropods and trilobites from the Lower Ordovician and Cambrian of Southwestern States, described by Dr. Josiah Bridge (144583); 1 leonite specimen containing sylvite, halite, etc., from the mine of the Potash Co. of America, Carlsbad, N. Mex. (145355); 7,500 Ozarkian and Canadian brachiopods, about 15,000 Chazyian brachiopods, 2 lots of Cambrian fossils from Death Valley, Calif., and 3 lots of Cambrian fossils from Pioche, Nev. (145826); a series of thin sections of rocks from California and Washington collected by Prof. Waldemar Lindgren (146034); type fossil plants from the Tertiary of Idaho, Montana, Oregon, and Washington, described by Dr. R. W. Brown (146555); a collection of taeniolite from near Magnet, Ark., collected by H. D. Miser, Dr. C. S. Ross, and Dr. W. T. Schaller (146556); 560 Cretaceous and Tertiary plants from the Southern States and Alaska (146767); 25 post-Tertiary fossil shells and corals from the Island of Guam (147125); 11 fossil insects from the Permian, Chase formation, of Kansas (147481); 15 samples of Upper Cretaceous coprolite material from Alabama and Texas, collected by Dr. L. W.

Stephenson and W. H. Monroe (148512); (through Dr. H. T. Stearns) 119 Pleistocene marine shells from Guam (146819).

*National Park Service*: 45 insects (143580); (through Herbert Maier) 51 reptiles and amphibians from Brewster County, Texas, collected by T. E. Smith (146361); (through Arthur Stupka) skins and skulls of 2 bats collected in Blount County, Tenn., and Swain County, N. C. (147515).

*Iowa State College*, Ames, Iowa: (Through Dr. C. J. Drake) 2 bugs (147701, exchange).

*Iowa, University of*, Iowa City, Iowa: 28 Upper Cambrian invertebrate fossils from the Black Hills of South Dakota (145945).

*IRVINE*, Dr. F. R., Accra, Gold Coast: 53 plants mostly from Tennessee and South Carolina (146114).

*ISAAC DELGADO CENTRAL TRADES SCHOOL*, New Orleans, La.: Model, 1/16 size, of the Delgado "Flash" airplane, one of the entrants in the National Air Race held at Cleveland in September 1937 (148540).

*ITO*, Prof. T., Tokyo, Japan: 8 minerals from Japan and Korea (146108).

*IWATA, REITETSU*. (See under Japanese Embassy.)

*JACKSON*, R. W., Cambridge, Md.: 18 mollusks (147146); 103 mollusks from Ecuador (147469).

*JACKSON*, T. L. (See under D. P. Curtis.)

*JACOKES*, Mrs. RUTH F., Washington, D. C.: A beaded coin purse bearing the initials "A. C. T." and the date "1847," made at the School for the Deaf and Blind, Staunton, Va., for Augustus Cornelius Tyler, Richmond, Va., who gave it to the lender's mother, Mrs. Martha Tyler Floyd, Longwood, Charles City County, Va. (146331, loan).

*JACOT*, Dr. A. P. (See under U. S. Department of Agriculture, Forest Service.)

*JAMES*, Prof. M. T., Fort Collins, Colo.: 13 flies (8 species), 4 of which are represented by type or paratypes (146895, exchange).

*JAPANESE EMBASSY*, Washington, D. C.: (Through Reitetsu Iwata) 2 framed pictures, 1 of Mount Fujiyama and the other of the Aso volcano (146302).

*JAQUES*, Mrs. BERTHA E., Chicago, Ill.: 75 examples of local paper currency of the United States, issued 1830-1864 (145269).

*JARDIM BOTANICO*, Rio de Janeiro, Brazil. (See under Instituto de Biologia Vegetal.)

*JEFFORDS*, T. L., Washington, D. C.: Desk and chair used by Judge Isaac C. Parker, when a member of the House of Representatives, 1871-1875 (146305).

*JELLISON*, W. L. (See under U. S. Treasury Department, Public Health Service.)

*JENKINS*, DR. ANNA E. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

*JENNISON*, Prof. H. M., Knoxville, Tenn.: 1 fern from Tennessee (146269).

*JOHANSSON*, J. P., New York City: 34 pictorial photographs from miniature negatives for special exhibition during September 1937 (145254, loan).

*JOHN DEERE PLOW CO.* (See under Deere & Co.)

*JOHNS HOPKINS UNIVERSITY*, Baltimore, Md.: (Through Dr. W. G. Lynn) 2 lizards from Jamaica (146070).

*JOHNSON & JOHNSON*, New Brunswick, N. J.: A series of 25 specimens and 10 photographs arranged to illustrate progressive steps in the manufacture of the basic surgical dressings, absorbent cotton and gauze (145265).

*JOHNSON*, Mrs. B. F., Washington, D. C.: 1 rattan carpet beater (145152, loan); 1 radio receiving set of about 1920 (148299).

*JOHNSON*, E. N., Concord, Calif.: Parts of 4 skeletons showing extreme arthritic changes (145987).

*JOHNSON*, H. L., South Meriden, Conn.: 503 miscellaneous insects, 48 of which were collected in the Falkland Islands, the rest in Persia (147096).

*JOHNSON*, Prof. J. H., Golden, Colo.: 4 samples of algal limestone from the Oligocene of South Park, Colo. (145654, exchange); types of 3 species of land and fresh-water mollusks from the Oligocene of Colorado (146430).

*JOHNSON*, JIMMIE. (See under State of New Mexico).

*JOHNSON*, MARGARET C., Punta Gorda, Fla.: (Through Dr. A. S. Pearse) 8 slides of mites, 8 slides and 6 vials of lizard parasites, and 1 mole in alcohol (145506).

*JOHNSON*, DR. M. W., La Jolla, Calif.: 7 lots of copepods, including holotypes of 1 new subspecies, from California (148166).

*JOHNSON*, R. H., Woodlynne, N. J.: Skull of a dog without jaw (147479).

*JONES*, J. C., Washington, D. C.: 600 land, fresh-water, and marine shells from Florida (147531).

JORGENSEN, Capt. LIN, Seattle, Wash.: Bone face and torso of a doll found on Caton Island, Aleutian Islands, Alaska (145289).

JUDAY, Prof. CHANCEY, Madison, Wis.: 1 plankton sample, taken by the Boundary Exploring Party, July 31, 1912, collected by J. M. Jessup, Arctic Ocean between Alaska and Canada (146598).

JUDD, N. M., Washington, D. C.: 1 Navajo cradle from Chaco Canyon, San Juan County, N. Mex. (146002); 1 bird effigy of worked sandstone from "old Zuni" (Halona) (146751).

JULIHN, C. E., Washington, D. C.: (Through F. W. Horton) 1 sample of silver ore from the Cornucopia Mine, Benton, Calif. (147002).

KAMINIS, A., Tarpon Springs, Fla.: Half model of a sponge vessel (148525).

KANSAS, UNIVERSITY OF, Lawrence, Kans.: (Through Prof. R. H. Beamer) 8 insects (4 species), all paratypes (133511).

KARLOVIC, J. K. (See under Illinois Department of Agriculture.)

KAY, Prof. G. M. (See under Columbia University.)

KAYSER, Mrs. L. A., Washington, D. C.: Middle Sixteenth century repoussé silver cup bearing Italian hallmarks and a dedicatory inscription in French (145251, loan).

KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

KECK, Dr. D. D. (See under Carnegie Institution of Washington.)

KEELER, C. B., Glendora, Calif.: 2 prints, an etching, "Barria, San Francisco," and an aquatint, "Cogollos, Vega, Spain" (144418).

KEEN, MYRA, Stanford University, Calif.: 5 mollusks (paratypes) from California (147534).

KEIFER, H. H. (See under California Department of Agriculture.)

KEITH, ARTHUR, Washington, D. C.: An exhibition specimen of Devonian brown sandstone from central Maine, with gash veins filled with calcite (145562).

KELLOGG, Dr. REMINGTON, Washington, D. C.: 1 olive-backed thrush (145532).

KELLY, H. F., Portland, Oreg.: 1 cast shell of shrimp (148075).

KENNEDY, Prof. C. H., Columbus, Ohio, 30 ants (4 species), all paratypes (146995).

KENNEDY & Co. (See under J. E. Allen.)

KENNISON, Mrs. SARAH, Cattaraugus, N. Y.: 1 antique decorated Sandwich pressed glass bread plate (14686).

KENTUCKY AGRICULTURAL EXPERIMENT STATION, Lexington, Ky.: (Through P. O. Ritcher) 4 beetles, comprising type, allotype, and 2 paratypes from Kentucky (146364).

KILEY, LUCY M., Washington, D. C.: Military cartridge box of the period of the Spanish-American War (147010).

KILLIP, E. P., Washington, D. C.: 353 plants from Cuba (146731); 110 plants from Maryland (148097); 235 plants from Virginia (148546).

KINDLE, Dr. C. H., New York City: 23 selected Upper Cambrian trilobites from near State College, Pa. (144459).

KINDLE, Dr. E. M., Ottawa, Canada: 13 lithologic specimens taken from a well core through the Dundee limestone, Midland County, Mich. (146134).

KINOSHITA, Dr. TORAICHIRO, Hoichi, Hokkaido, Japan: 14 mollusks from Japan (145154, exchange).

KIRK, Dr. EDWIN, Washington, D. C.: 63 Devonian invertebrate fossils from the northern part of the southern peninsula of Michigan (145850).

KIRK, R. E., Washington, D. C.: 1 robin (144976).

KITTRIDGE, F. L., Rochester, N. Y.: Photograph of Brig. Gen. George W. Morgan, U. S. Volunteers (147535).

KLUK, GUILLERMO, Iquitos, Peru: 43 orchids (144616); 92 plants from Peru (146103, 146645).

KNOBLOCH, I. W., Mojarachic, Chihuahua: 15 plants from Chihuahua (148010).

KNOWLTON, Dr. G. F. (See under Utah State Agricultural College.)

KNULL, Prof. J. N., Columbus, Ohio: 11 beetles, representing 5 species, 2 of them by 3 paratypes (145873). (See also under Ohio State University.)

KOMP, W. H. W., Ancon, Canal Zone: 3 beetles (146678, 146999).

KOZMINSKI, Dr. Z., Suwalki, Poland: Approximately 35 copepods and 1 vial of zooplankton (145660, exchange); approximately 44 amphipods from Wisconsin (147539).

KRIVITSKY, NELSON, Baltimore, Md.: 6 reptiles from Matanzas, Cuba, and 8 crabs (145567).

KROMBEIN, K. V., Roslyn, Long Island, N. Y.: 4 wasps, paratypes of 2 species (146461).

KRUOKOFF, B. A., New York City: 127 plants from Sumatra (144412); 2 plants (145979, exchange); 535 plants from Brazil and Ecuador (146010, exchange); 42 plants from Puerto Rico (147188).

KRYGER, Dr. J. P., Gentofte, Denmark: 50 lots of beetle larvae, 43 of which have been reared, and 15 of which comprise species new to the collections (145768).

KUBICHEK, W. F. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)

KUMM, Dr. H. W. (See under Rockefeller Foundation.)

KUSTER, Prof. K. C., Bloomsburg, Pa.: About 10 medusae (145015).

KUTCHA, G. M., Pittsburgh, Pa.: 5 mollusks (paratypes of 2 species) from Alabama (145935).

KYANCUTTA MUSEUM, Kyancutta, South Australia: 1 piece of Kyancutta, Le Hunte County, South Australia, meteorite (914 grams) (133352, exchange); 16 Lower Cambrian sponges from South Australia (143687, exchange).

KYOTO IMPERIAL UNIVERSITY, Kyoto, Japan: (Through Dr. M. Tagawa) 113 ferns and fern allies from Japan (147038, exchange).

LADD, Dr. H. S., Richmond, Va.: 1 fossil crustacean from the Fiji Islands (144571).

LA FEVER, M. W., Fairfax, Va.: 2 snakes from Waples Mill near Fairfax (145320).

LAGEN, M. A., Bellevue, Wash.: 4 small whale embryos and head of a 10-foot whale embryo from Alaska (145183).

LAKESIDE PRESS, Chicago, Ill.: 1 copy of folder on aquatints with 6-color deep-tone reproduction of the colored aquatint "Kings Weston, near Bristol, the Seat of Lord de Clifford" (146606).

LAMBERT, BILLY. (See under Johnny Selby.)

LAMONT, Dr. ARCHIE, Birmingham, England: 15 brachiopods and other fossils from the Ordovician of the Girvan District of Scotland, and 1 brachiopod from the Carboniferous of Ireland (148008, exchange).

LANE, Mrs. C. A., Bozman, Md.: Early nineteenth century quilt, pieced in 8-pointed star pattern and joined with squares of hand-blocked chintz, made by an ancestor of the Lane family (147894).

LANG, W. B., Carlsbad, N. Mex.: About 12 phyllopods (145761).

LANSDALE, Mrs. P. V. H., San Francisco, Calif.: 1 magic lantern, oil-burning, of the period about 1877, 12 colored lantern slides, 3 inches by 12 inches, and 2 plain tinted glass slides (146437).

LARKIN, ELLA F., New York City: (Through R. M. Holmes, Jr.) Oil por- trait of Maj. Gen. Hiram Berdan and a sketch of his headquarters (145832).

LAROCQUE, A., Ottawa, Canada: 4 brachiopods from the Pleistocene 2 miles from mouth of Petite Riviere-du-Loup, Temiscouata, Quebec (145783); 77 mollusks from Canada (145036).

LARSEN, Prof. E. S., Cambridge, Mass.: 2 samples of keilhauite-bearing granite from Rhode Island (145937).

LATHAM, Dr. VIDA A. (See under State Microscopical Society of Illinois.)

LAUMAN, Dr. U. M., Randle, Wash.: 1 stone adz handle found in a field at Mossy Rock, eastern Lewis County, Wash. (144423).

LAWLER, Dr. H. J., Baltimore, Md.: Type of cestode from near Ingleside, Douglas Lake, Mich. (147080).

LAWRENCE, Dr. D. B., Minneapolis, Minn.: 2 plants from Washington (145273).

LEE, E. W. (See under Pan American Airways.)

LEE, Mrs. MARION, Washington, D. C.: 224 mollusks from Beltsville, Md. (144586); 24 land shells and slugs from Washington, D. C., and Thornton Gap, Va. (145742). (See also under Mrs. Elizabeth Dietz.)

LEEDS MODERN SCHOOL, Leeds, England: (Through F. W. Hardy) 3 samples of iron ore from North Africa (142674).

LEMMER, F. J., Lakehurst, N. J.: 77 Lepidoptera (144467).

LEON, Rev. Brother, Vedado-Habana, Cuba: 11 ferns from Cuba (148105).

LEONARD, E. C., Washington, D. C.: 14 marine shells from Haiti (146682). (See also under Smithsonian Institution, National Museum.)

LEONARD, Mrs. H. G., Noroton, Conn.: 1 moth (148107).

LERNER, MICHAEL, New York City: 1 mounted blue-fin tuna, caught in the Atlantic Ocean off Nova Scotia (146038).

LEVIN, A. J., Detroit, Mich.: 1 adding and subtracting machine, invented by Judah L. Levin (father of the donor) who was the recipient of several patents in calculating machines in the period 1902 to 1906 (147976).

LEVOR & Co., Inc., G., Inc., Gloversville, N. Y.: 2 samples of white leather for gloves or women's shoes, one skin of kid leather and one of cabretta leather (147095).

LEWIS, ELEANOR C., Yellow Springs, Ohio: (Through Mrs. Adelia D. Bauer) 1 pieced cotton quilt in a stripe pattern made about 1840 in

New York State by the donor's grandmother, Mrs. Lovisa (Seeley) Gates (1796-1861) (145004).

LI, Dr. FU-CHING, Kaffeng, Honan, China: 4 mollusks from Hichow, Province of Anhui, China (145249).

LIGHT, Prof. S. F., Berkeley, Calif.: 15 lots of Bryozoa (145369); 30 amphipods and 4 crabs (145410, 145617, 147293); 1 crab from San Antonio, Durango, Mexico (145844).

LIGHTOLLER, Dr. G. S. (See under University of Sydney.)

LIMA, Dr. A. DA COSTA, Rio de Janeiro, Brazil: 5 Hymenoptera, all paratypes (148436, exchange).

LINDSAY, D. R., Lawrence, Kans.: 1 leafhopper, a paratype (146194, exchange).

LINSEY, Dr. A. A., Washington, D. C.: 1 moss plant from Maine (145377).

LINGEBACH, CARLETON. (See under Smithsonian Institution, National Museum.)

LINGNAN UNIVERSITY, Canton, China: 179 plants from Hainan, China (144654, exchange); 18 plants from China (146642, exchange).

LITTLE, Dr. E. L., Jr., Flagstaff, Ariz.: 39 ferns from Arizona and Oklahoma (144520); 5 plants from Arizona and Oklahoma (145185, 147354). (See also under U. S. Department of Agriculture, Forest Service.)

LLOYD, Dr. B. J. (See under Pan American Sanitary Bureau.)

LOMEN, CARL, Washington, D. C.: 3 pottery lamps, Eskimo, Nunivak Island, Alaska (146821).

LOOFF, Mrs. H. B., Oak Harbor, Whidbey Island, Wash.: 23 plants from Kodiak Island (146809).

LOSADA S., Dr. BELISARIO, Cali, Colombia: Adult and larva of a moth (145-142); a small collection of lepidopterous insects and their parasites (146796).

LOS ANGELES MUSEUM, Los Angeles, Calif.: (Through Dr. J. A. Comstock) 10 specimens of Lepidoptera (6 species) (146362); 15 insects (9 species) (146876).

LUNZ, G. R., Jr. (See under Smithsonian Institution-Hartford Expedition.)

LURAY CAVERNS CORPORATION, Luray, Va.: (Through R. C. Harnsberger) 2 large transparencies of Luray Cavern views for the exhibition series (142-761); 2 large pictures of Luray Cavern views for the exhibition series (147530).

LUTZ, BERTHA, Rio de Janeiro, Brazil: 4 tree frogs from Nova Friburgo, Brazil, collected in February 1937 (142912).

LYNN, Dr. W. G. (See under Johns Hopkins University.)

LYON, Dr. M. W., Jr. (See under Alton Bernhardt and Dr. W. J. Tinkle.)

LYONNET, Prof. E., Mixcoac, D. F., Mexico: 142 plants from Mexico (144358).

MACGINITIE, Prof. G. E., Corona Del Mar, Calif.: 2 alecyonarians, 2 flatworms, 1 lot of hydroids, approximately 75 amphipods, 3 vials of echinoderms (148-064).

MACGINITIE, Mrs. G. E., Corona Del Mar, Calif.: 1 medusa, 175 isopods, approximately 200 amphipods, 2 shrimps, 2 nebalia, 8 pycnogonids, 5 copepods, 1 sagitta, 2 marine annelids, 1 echinoderm (144660).

MACGOWAN, Dr. J. J. (See under Josephine B. MacGowan.)

MACGOWAN, JOSEPHINE B., Ashland, Miss.: (Through Dr. J. J. MacGowan) 3 small trunks (147560).

MACNEIL, F. S., Washington, D. C.: 23 mollusks from near Uchee, Russell County, Ala. (146297).

MACRENARIS, E. P., Tarpon Springs, Fla.: Half model of the sponge sloop *Emily* (148526).

MAHIN, Lt. Col. F. C. (See under Mrs. F. W. Mahin.)

MAHIN, Mrs. F. W., Fort Snelling, Minn.: (Through Lt. Col. F. C. Mahin) Miscellaneous collection of European bonnets, Louis XVI dressmaker's mannequin doll, Bohemian double glass, Belleek and Wedgwood chinaware and Venetian glass (145341, loan); 1 Bulgarian pillow lace making ensemble, 1 painted picture with applied butterfly wings, 1 tray with inlay of butterfly wings, and 20 volumes of "History of English Furniture" (145342).

MAIER, HERBERT. (See under U. S. Department of the Interior, National Park Service.)

MAINS, Prof. E. B. (See under University of Michigan.)

MAKRIKUUS, DR. EMIL, Cafetal Concordia, Oaxaca: 264 plants and a small collection of insects from Oaxaca, Mexico (147872).

MANN, Dr. L. K., Chicago, Ill.: 17 plants from Idaho (147131).

MANN, Mrs. W. M., Washington, D. C.: 1 dance belt from Piroe, Ceram, Moluccas (146363).

MANTER, Dr. H. W., Lincoln, Nebr.: 6 lots of platyhelminths, types and paratypes (144380); 4 slides of types of platyhelminths (147452); 2 type trematodes (148028). (See also under Capt. G. Allan Hancock.)

**MARRLE**, Dr. J. P., Washington, D. C.: Analyzed samples of pitchblende-silica ore and pitchblende with barite from Eldorado Mine, Great Bear Lake, Canada (146311).

**MARGULIES**, JOSEPH, New York City: 53 prints for special exhibition during November 1937 (145626, loan); 1 soft ground etching "From the Ghetto" by the donor (146091).

**MARIA**, GENASIO, Arequipa, Peru: 4 minerals from Province of Arequipa, Peru (145793); 8 samples of cristobalite, 1 opal, and 1 chloropal from Peru (146325).

**MARSH**, MATTIE, Talladega, Ala.: 1 cultivated plant from Alabama (147384).

**MARSHALL COLLEGE**, Huntington, W. Va.: 100 plants from West Virginia (148045, exchange).

**MARSHALL**, E. B., Washington, D. C.: 1 Tennessee warbler (146757); 108 fishes, 1 frog, and 2 mollusks collected at Laurel, Md., by the donor (146098).

**MARSHALL**, G. H., Benton Harbor, Mich.: 1 photograph of Bryan Donkin, developer of the Fourdrinier paper machine, and 1 booklet giving the history of his company in England (144524).

**MARSHALL**, Dr. PATRICK, Wellington, New Zealand: 1 sample each of comendite, riebeckite, and aegerine and 1 microslide with crystals of tuhualite (145527, exchange); 1 sample of riebeckite from Mayor Islands, New Zealand (146295).

**MARTIN**, JOEL, Gainesville, Fla.: About 25 amphipods (146663).

**MARTIN**, ROBERT, Washington, D. C.: 1 spotted salamander from Harwood, Md. (147282).

**MARTIN**, Mrs. SYLVIA G., South Miami, Fla.: 27 insects from Peru (145044).

**MARTSCH**, W. P., Washington, D. C.: 2 barnacles on aleyonarian (144291).

**MARYE**, W. B., Baltimore, Md.: 1 lot of potsherds collected between Nags Head and Kill Devil Hill, Dare County, N. C. (147415).

**MASARYK UNIVERSITY**, Brno, Czechoslovakia: 100 plants from Czechoslovakia (Century XIII) (147355, exchange).

**MASON**, Dr. J. N., Princeton, N. J.: 400 brachiopods from the Upper Pogonip formation of Nevada (148152).

**MASSEY**, Prof. A. B. (See under Virginia Polytechnic Institute.)

**MATHIS**, Mrs. ELMA A., Asbury Park, N. J.: China platter used on the U. S. S. *Maine* (146662).

**MATIEGKA**, Prof. JINDŘICH. (See under Museum of Man.)

**MATTHES**, Mrs. MARVEL M., Staten Island, N. Y.: Cotton patchwork and applique quilt "The Star of Bethlehem" with applied border and corners of motifs cut from a polychrome print of floral design, made by Betsy Tottenville, Staten Island, N. Y., in 1810, and bequeathed to Ella Totten Butler, who presented it to her god-daughter, the donor (147358).

**MATTOX**, Dr. N. T., Lafayette, Ind.: (Through Dr. H. J. Van Cleave) 9 phylloids, including types, allotypes, and paratypes (145022).

**MAXON**, Dr. W. R., Washington, D. C.: 10 plants from Washington, D. C. (144420, 148420). (See also under Smithsonian Institution, National Museum.)

**MAYXWELL**, MARY E., Washington, D. C.: Jade plaque in ebony frame, silver sword hilt candle holder (146604).

**MCALPINE**, W. S., Birmingham, Mich.: 4 Lepidoptera, with holotype, allotype, and 2 paratypes (145885, exchange).

**MCALLUM**, ROY, Norwood, Pa.: Model,  $\frac{1}{16}$  size, of a U. S. Navy airplane, "F-9-C-2" formerly in use with the airships *Akron* and *Macon* (144373, loan).

**MCCHALEY**, ROBERT, Jr., Ithaca, N. Y.: 1 turtle (148446).

**MCCLUSKEY**, W. A., Moscow, Idaho: 3 shells from the vicinity of Moscow (147079).

**MCCONNELL**, DUNCAN, Austin, Tex.: 1 type of ellestadite from Crestmore, Calif. (145846).

**MCDONNELL**, Mrs. MARY T., Warrenton, Va.: Silver cup, silver ladle, dish cross, and 35 spoons (146042, loan).

**MCDONOUGH**, ROSE S., Montclair, N. J.: Silver pitcher presented to Commodore Thomas MacDonough, U. S. N., by the citizens of Lansingburg, N. Y. (137798, loan).

**MCDONOUGH**, T. C., Ridgefield, N. J.: Silver goblet presented to Commodore Thomas MacDonough, U. S. N., by the citizens of Lansingburg, N. Y. (144649, loan).

**MCDOUGALL**, Mrs. ELSIE, Woodstock, N. Y.: Samples of brown cotton, raw silk, and yarns spun from the same, a wooden spindle, 2 silk sashes, 1 sample each of tie and dye wool fabric, and cloth woven of ixtle fiber, and 9 small photographs, collected by the donor in Mexico (146601).

**MC'DUNNOUGH**, Dr. J. H. (See under Canadian Government, Department of Agriculture.)

**MC'ELVARE**, R. R., New York City: 24 moths (147901, exchange); 48 moths (147954, exchange).

McFARLIN, J. B., Sebring, Fla.: 1 cultivated fern from Florida (147971). (See also under Florida Botanical Garden.)

McGREGOR, E. A. (See under U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine.)

McILHENNY, E. A., Avery Island, La.: 1 vermillion flycatcher (145416); 2 bird skins (146727).

MCINTOSH, ALLEN, Washington, D. C.: Skin and skull of a bat (148083).

MCKINLEY, A., Severn, Ontario: 10 red squirrel skins with skulls from Severn, Ontario (145402).

McMILLIN, Prof. H. C., Seattle, Wash.: About 6 parasitic copepods, including the type of a new species (146334).

MCNALLY, Dr. P. A. (See under National Geographic Society, U. S. Navy Eclipse Expedition.)

MCVAUGH, Prof. ROGERS. (See under University of Georgia.)

MEEHEAN, O. L., Kearneysville, W. Va.: About 37 copepods (147414).

MEHRING, Mrs. BESSIE D., Keymar, Md.: 2 milking machines, 1 the original working model made in 1884 and the other a practical "cow milker" patented in 1892 by William M. Mehring, husband of the donor (148530).

MELHASE, JOHN, Berkeley, Calif.: 1 each of the minerals boofhite, and powellite from California (146130, exchange); 1 sample of hedenbergite from Baird, Shasta County, Calif. (146554, exchange).

MENONI, Dr. CARLO, Chiavari (Genova), Italy: 12 ants (4 species) (146333, exchange).

MERCK & Co., INC., Rahway, N. J.: 1 sample each of Vitamins B<sub>1</sub> and C (145285).

MERRIAM, Dr. C. H., Washington, D. C.: 1 grizzly bear (146392).

MERRIAM, Dr. C. W., Ithaca, N. Y.: 36 Devonian brachiopods and corals from Nevada (148434).

MERTENS, Dr. ROBERT. (See under Natur-Museum Senckenberg.)

MESERVE, Dr. F. G. (See under Capt. G. Allan Hancock.)

MEYER, H. F., Bethesda, Md.: 1 mink from Foxhall Village, Md. (144675).

MEYER, M. C., Urbana, Ill.: 20 leeches (148439).

MIAMI, UNIVERSITY OF, Coral Gables, Fla.: (Through Prof. J. F. W. Pearson) 3 beetles (145509).

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.:

*Department of Botany:* 487 plants from Mexico, Texas, and Central America (145165, 145786, 146434, 147243, exchange); 124 plants collected in Mexico by E. Matuda (147577, 148012 exchange); (through Prof. E. B. Mains) 250 plants from British Honduras (144588, exchange).

*Museum of Zoology:* (Through I. J. Cantrall) 8 grasshoppers, paratypes (146552, exchange); (through Prof. G. M. Ehlers) 20 Permian brachiopods from Sicily (146132, exchange); (through Dr. C. L. Hubbs) 1 fish from British Columbia (145858).

MICKEL, Dr. C. E., Minneapolis, Minn.: 2 fossil plants from the Dakota sandstone of Minnesota (146735); 2 insects, paratypes (147183, exchange).

MIDDLETON, GEORGE, Providence, R. I.: 1 wiped joint, wiped by the donor in 1908, and a wiping cloth (146288).

MILES, S. S., Baltimore, Md.: A microscope slide of a new genus and species of hydroid from Mount Desert Island, Maine (144498).

MILLAM, RICHARD, Vedado, Habana, Cuba: Set of 3 Cuban postage stamps commemorating the fourth centenary of the establishment of the cane sugar industry, 1535-1935 (145529); 1 Cuban postage stamp issued to commemorate the first centenary of the first Cuban railroad train, which ran on November 19, 1837 (145954).

MILLE, Father LOUIS, Manabi, Ecuador: 3 plants from Ecuador (146123).

MILLER, DAN, Pickwick Dam, Tenn.: 3 trilobites from the Devonian of west Tennessee (144308).

MILLER, G. S., Jr., Washington, D. C.: 6 plants from New York and Florida (144617); 5 skulls of the European jay, 14 mammals, 23 fishes, and 1 electric apparatus of ray, 92 reptiles, 5 crustaceans and an iron ax-head (147486).

MILLER, HANK. (See under Pump Engineering Service Corporation.)

MILLER, Mrs. R. B., Washington, D. C.: Silver pendant, German (146106).

MILLIKEN, H. K., New York City: Sample swatch of double-woven cotton bedspread "The Snow Goose" and 3 photographs (145425).

MINERALOGISCH-PETROGRAPHISCHES INSTITUT UND MUSEUM DER UNIVERSITAT, Berlin, Germany: Examples of 5 meteorites: Iquique, Ternera, Ibbenbühren, Klein-Wenden, and Gutersloh (144550, exchange).

MINERALOGISK-GEOLISK MUSEUM, Oslo, Norway: (Through Dr. Ivar Oftedal) 1 chip of the Morradal meteorite (146158, exchange).

MINNESOTA, UNIVERSITY OF, Minneapolis, Minn.: 531 plants, mainly from Minnesota (145589, exchange).

MINTON, Maj. H. E., Washington, D. C.: 1 lot of potsherds from ruin on ridge overlooking Fort Wingate Ordnance Depot, McKinley County, N. Mex., collected in 1934 by the donor (148557).

MISER, H. D., Washington, D. C.: A collection of miscellaneous minerals from Magnet Cove, Ark. (147033).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 431 plants from Missouri, Panama, Arkansas, and Texas (144651, 146438, 146697, 147490, 148151, 148201, exchange); 6 ferns from Costa Rica (147482, exchange).

MISSOURI HISTORICAL SOCIETY, St. Louis, Mo.: (Through Mrs. N. H. Beaugard.) A collection of 13 motion-picture reels relating mainly to the aeronautical accomplishments of Col. Charles A. Lindbergh (147977).

MIZELLE, Dr. J. D., Stillwater, Okla.: 22 slides of trematodes, types, from Illinois fishes (145354); 14 paratypes of helminths (146452); type of parasitic worm (146743).

MOLITOR, D. A., Washington, D. C.: 1 pen-and-ink drawing by Edward Molitor, father of the donor, when 13, in 1879 (146550).

MONTANA STATE UNIVERSITY, Missoula, Mont.: 14 plants from Montana (147307, exchange); (through F. A. Barkley) 45 plants from Montana and Idaho (147055, exchange).

MONTGOMERY, ARTHUR, New York City: 10 samples of variscite and associated minerals from Fairfield, Utah (147563, exchange).

MOORE, R. K., Forest City, Ark.: (Through U. S. Department of Commerce, Bureau of Fisheries) 40 fishes and 1 jar of Amphibia, collected in Arkansas, spring of 1937 (144503).

MOOREHEAD, Dr. W. K., Andover, Mass.: 1 lot of charred wood fragments from Mound 43, near Chillicothe, Ohio, collected by Dr. Moorehead in 1889 or 1890 (148427).

MORELAND, Prof. G. E., Greenville, Ill.: 15 fresh-water shells from Ithaca, N. Y. (148066).

MORGENWECK, E. J., New York City: Bandonion (combination of chromatic accordion and concertina) made in 1870 by Alfred Band, Krefeld, Germany (145967).

MORRIS, R. G., Seldovia, Alaska: (Through National Geographic Society) A fragment of coal pierced by a recent boring mollusk, from Alaska (147440).

MORRISON, Dr. J. P. E., Washington, D. C.: 3,300 mollusks, 2 frogs, 4 bottles of Crustacea, 271 fishes, 10 crayfishes, 46 bottles and 3 vials of insects, 1 bottle of red algae collected during 1937 in Virginia, Maryland, and Iowa (144625, 147309, 147310); (with Robert Bray) 200 mollusks, 1 turtle, 3 crustaceans, 10 leeches, 8 amphibians, 3 bottles of insects, and 78 fishes collected in April 1937 in Maryland (144623).

MORROW, A. L., Lawrence, Kans.: A collection of types of Cretaceous Foraminifera and Ostracoda from Kansas (146119).

MORTON, Mrs. ELLEN. (See under Morton Otis.)

MOTION PICTURE MACHINE OPERATORS' PROTECTIVE UNION No. 224, Washington, D. C.: (Through Frank Baker) 1 Simplex motion-picture projector and 1 Powers Cameragraph head with base and lamp house (147084).

MOTSINGER, J. P., Lakewood, Ohio: Desk fan operated by a hot-air engine and alcohol burner (145932).

MUENSCHER, Prof. W. C., Ithaca, N. Y.: 43 ferns, mainly from Guatemala and Panama (145554). (See also under Cornell University, New York State College of Agriculture.)

MULLER, Dr. LORENZ, München, Germany: 1 frog (paratype) from Brazil (144691, exchange).

MULLINGS, M. V., Washington, D. C.: 2 ospreys (148098).

MURDOCH, ALEXANDER, Pittsburgh, Pa.: 5 bookplate impressions (145608, exchange).

MURIE, O. J. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)

MURRAY, Rev. J. J., Lexington, Va.: 4 bird skins, 2 song sparrows, and 2 juncos from North Carolina (144973).

MURRILL, Dr. W. A., Gainesville, Fla.: Small collection of miscellaneous insects and egg masses and 3 frogs (142603); 3 insects from Florida (144490); 118 miscellaneous insects from Florida (144545, 144682, 145001, 146117).

MURILLO, L. M., Bogota, Colombia: About 500 miscellaneous insects from Colombia (142594).

MUSÉE PHYSIOGRAPHIQUE, Cracovie, Poland: 160 plants from Poland (148124, exchange).

MUSÉUM D'HISTOIRE NATURELLE, Geneva, Switzerland: (Through Dr. Raymond Galopin) Specimen of Union meteorite (185 grams) from 100 kilometers east of the village of Moro-Mejillones, Chile (148437, exchange).

MUSEUM OF MAN, Prague, Czechoslovakia: (Through Prof. Jindrich Matiegka) 4 casts of living Negritos from the Ituri forest of Belgian Congo, and the cast of a skeleton of a pygmy from Belgian Congo (147956, exchange).

MUSGRAVE, P. N., Fairmont, W. Va.: Small collection of beetles, including 176 from India (147003).

MUTCHLER, A. J. (See under American Museum of Natural History.)

MYERS, DR. G. S. (See under Dr. Paul Bartsch and E. D. Reid.)

NANKIVELL, F. A., New York City: 50 etchings, drypoints, and mezzotints, some in color, for special exhibition April 25 to May 31, 1938 (147536, loan).

NASON, T. W., Reading Mass.: 50 mats containing 57 wood engravings and copper engravings, exhibited during January 1938 (146127, loan); 1 engraving, "Woodcock" (147191).

NATIONAL BROADCASTING CO., INC., New York City: 10 broadcast microphones representing the development of the instrument from about 1916-1920 to present (148157).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: 76 plants from California (146065). (See also under R. G. Morris.)

NATIONAL GEOGRAPHIC SOCIETY-U. S. NAVY ECLIPSE EXPEDITION: (Through Dr. P. A. McNally) 6 hermit crabs, 5 crabs, 1 barnacle, 1 shrimp, 9 insects, some echinoderms, 3 reptiles, 1 mollusk, and 2 rats (143613).

NATIONAL GEOGRAPHIC SOCIETY-SMITHSONIAN EXPEDITION TO SUMATRA: 30 birds, 125 mollusks, 19 mammals, 2,765 fishes, a few reptiles, about 15 shrimps, 6 crabs, and 51 insects (145564).

NATIONAL MUSEUM OF SOUTHERN RHODESIA, Bulawayo, Southern Rhodesia: (Through Dr. G. Arnold) 57 species of ants from Africa (146752).

NATURHISTORISCHES MUSEUM, Vienna, Austria: 20 bird skins from East Africa (144970, exchange).

NATURHISTORISKA RIKSMUSETT, Stockholm, Sweden: 9 plants from Greenland (146083, exchange); 22 plants (148298, exchange).

NATUR-MUSEUM SENCKENBERG, Frankfurt-am-Main, Germany: (Through Dr. Robert Mertens) 2 frogs from Manacapuru, Amazonas, Brazil, collected by W. Erhardt (146347, exchange).

NEBRASKA, UNIVERSITY OF, Lincoln, Nebr.: (Through Prof. I. H. Blake) 1 catfish from Gretna, Nebr. (147124).

NEEDHAM, Prof. C. E. (See under New Mexico School of Mines.)

NEEDHAM, DR. P. R., Stanford University, Calif.: About 20 amphipods (146299). (See also under U. S. Department of Commerce, Bureau of Fisheries.)

NESBIT, H. F., and SISTERS, Washington, D. C.: 1 Parian pitcher (145796).

NETHERLANDS INDIES, Mining and Geological Survey Department, Bandoeng, Java: (Through Dr. W. Holleman) 11 casts of skulls of prehistoric man (144726, exchange).

NETTLETON, G. E., 2d, Amherst, Mass.: 1 insect (145875).

NEUMANN, L. M., Columbia, Mo.: (See under Prof. W. A. Tarr.)

NEVEL, W. D., Andover, Maine: 1 large sample of triphylite from Newry Mountain, Maine (146365).

NEW HAVEN CLOCK CO., New Haven, Conn.: (Through P. H. English) Exhibit of modern timepieces sent to replace ones in exhibit (145329).

NEW JERSEY AGRICULTURAL EXPERIMENT STATION, Pemberton, N. J.: (Through C. S. Beckwith) 30 weevils from New Jersey (144342); 1 insect from New Jersey (144378).

NEW JERSEY ZINC CO., New York City: 29 raw materials and zinc products for exhibition (148534).

NEW MEXICO SCHOOL OF MINES, Department of Geology, Socorro, N. Mex.: (Through Prof. C. E. Needham) 119 type Foraminifera from New Mexico (146607, exchange).

NEW MEXICO, STATE OF:

Department of Game and Fish, Santa Fe, N. Mex.: (Through Jimmie Johnson) 1 larval salamander from Quay County, N. Mex. (146095).

State College, State College, N. Mex.: (Through Dr. J. R. Eyer) 3 beetles and some fragments (144672).

NEW YORK BOTANICAL GARDEN, New York City: 1 fern from Brazil (143158, exchange); 55 plant photographs, mostly representing type specimens of Verbenaceae (144408, 144680, 147391, exchange); 105 plants from Puerto Rico, Mexico and Hispaniola (145288, 145418, 147441, exchange); 1,857 plants, mostly from Florida (145630, 145847, exchange).

NEW YORK CONSERVATION DEPARTMENT, Albany, N. Y.: (Through Dr. J. R. Greeley) 137 fishes from New York, collected in summer of 1935 (145926).

NEW YORK STATE COLLEGE OF FORESTRY, Syracuse, N. Y.: 107 wood samples of trees of the United States (148019, exchange).

NEW YORK TIMES, New York City: Model, 1/16 size, of the Curtiss "R" airplane, modified, used by Victor Carlstrom in his flight from Chicago to New York, November 2, 3, 1916, which was sponsored by the New York Times (146526).

NEW YORK ZOOLOGICAL SOCIETY, New York City: (Through Gloria Hollister) 19 fishes from Bermuda collected during summer of 1937 (144903, exchange).

NICOLAY, ALAN, Upper Montclair, N. J.: 111 beetles (146817).

NININGER, H. H., Denver, Colo.: 1 individual of the Johnson City, Stanton County, Kans., stone meteorite (1.955 grams), and 1 portion of the Kelly, Colo., meteorite (405 grams) (146336, exchange): 1 slice of the Coolidge, Kans., meteorite (202.3 grams) (146754).

NISSON, W. H., Petaluma, Calif.: 1 sample of lawsonite from California (146815).

NORMAN, J. R. (See under British Government, British Museum.)

NORTH AMERICAN AVIATION, INC., Inglewood, Calif.: A model of the B-T-9-C airplane, which is in current use by the U. S. Army Air Corps (148387).

NORTH CAROLINA DEPARTMENT OF AGRICULTURE, Raleigh, N. C.: (Through C. S. Brimley) 1 vial of parasitic copepods, 4 vials of parasitic worms, 2 vials of oligochaetes (145394).

NORTH CAROLINA UNIVERSITY OF, Chapel Hill, N. C.: 30 United States plants (147394, exchange); (through Dr. R. E. Coker) 6 beetle larvae (145863).

NORTH DAKOTA AGRICULTURAL COLLEGE, Fargo, N. Dak.: (Through Prof. O. A. Stevens) 18 plants from North Dakota (147948).

NORTHUP, M. A., Jersey City, N. J.: 1 sample of mineral millerite from a mine near West Pittston, Pa. (144621, exchange).

Oberlin College, Oberlin, Ohio: (Through Allen M. Bailey) 15 photographs commemorating the centennial of the beginning of college education for women, 1837 (146337).

O'FARRELL, MARY T., Washington, D. C.: Photograph of Sitting Bull, and a scalping knife purported to have belonged to Sitting Bull, given by a delegation of Indians to Capt. Patrick O'Farrell, father of the donor (148018).

OFTEDAL, DR. IVAR. (See under Mineralogisk-Geologisk Museum.)

O'HARA, MRS. ELIOT, Washington, D. C.: Earthenware vase collected in Egypt by Annie-May Hegeman (148292).

OHIO STATE MUSEUM, Columbus, Ohio: 3 bones of a passenger pigeon (147228).

OHIO STATE UNIVERSITY, Columbus, Ohio: (Through J. N. Knoll) 6 beetles (146396, exchange).

OLD, DR. M. C., Collegeville, Pa.: A collection of sponges from Tangier Sound, Chesapeake Bay (144635).

OLIVIER, LOUIS, University Heights, N. Y.: 3 helminths (1 type and 2 paratypes) (147477).

OLMSTED, DR. A. J., Washington, D. C.: 5 pictorial photographs by Floyd Vail, entitled "After the Storm," "Winter's Finish," "Damp and Cold," "Under the Pegnitz," "Adoration" (146683); 1 pictorial photograph by Alfred Stieglitz entitled "Watching for the Return" (147001).

OREGON TRAIL MEMORIAL ASSOCIATION, INC., New York City: (Through Perry Driggs) 6 copies of the Oregon Trail half-dollars struck, 2 each, at the Denver, Philadelphia, and San Francisco mints in 1938 (147109).

ORSINGER, F. G., Washington, D. C.: 1 small spring lancet, with carrying case, for addition to the history of medicine collection (145365). (See also under U. S. Department of Commerce, Bureau of Fisheries.)

OTIS, MORTON, New York City: (Through Mrs. Ellen Morton) 2 framed copies of the Doctor of Medicine diploma of Dr. W. T. G. Morton from the University of Baltimore (146585).

OWEN, F. J., New York City: (Through R. E. Cropley) Portraiture model of the steamship *Carinthia*, made by R. E. Cropley (145609). (See also under Mrs. Edith K. Roosevelt.)

PACIFIC SCIENTIFIC INSTITUTE OF FISHERIES AND OCEANOGRAPHY, Vladivostok, U. S. S. R.: (Through A. J. Tarantet) 240 fishes, comprising about 141 species from the U. S. S. R. (146057, exchange).

PACKCHANIAN, DR. A., Washington, D. C.: 3 young tree frogs from Sarasota, Fla. (145333).

PAINTER, PROF. R. H., Manhattan, Kans.: 8 flies (3 species), all paratypes (121843, exchange).

PALACHE, PROF. CHARLES, Cambridge, Mass.: Samples of babingtonite from Westfield, Mass., and miargyrite from Zacatecas, Mexico (146811, exchange).

PALMER, PROF. MIRIAM A., Fort Collins, Colo.: 5 type slides (5 species) of aphids (147255).

PAN AMERICAN AIRWAYS, Washington, D. C.: (Through E. W. Lee) A model of the Sikorsky "Yankee Clipper," type S-40, which was developed by

the Sikorsky Aviation Corporation, of Bridgeport, Conn., and has been in use by the Pan American Airways since 1932 for passenger and commercial service from Florida through the West Indies and to South America (148528).

**PAN AMERICAN SANITARY BUREAU**, Washington, D. C.: 4 cotton rats (145925); (through Dr. B. J. Lloyd) 12 adults and 3 larvae of mosquitoes (145327).

**PAN AMERICAN UNION**, Washington, D. C.: (Through J. L. Colom) 1 beetle collected by Dr. C. E. Chardon in Maimon, Dominican Republic (144972).

**PAPPAS**, Mrs. WILLIAM, San Antonio, Tex.: 50 fresh-water medusae (144679).

**PARDOE**, Dr. J. B., Bound Brook, N. J.: 106 pictorial photographs for special exhibition in October (145024, loan); 2 pictorial photographs (145917).

**PARKE, DAVIS & Co.**, Detroit, Mich.: 1 sample each of ampoules of emetine hydrochloride and ovarian substance for addition to the medicinal forms collection (144371); 220 specimens of pharmaceutical preparations which illustrate therapeutic classifications of medicine (147292).

**PARKER**, H. W. (See under British Government, British Museum.)

**PARKER**, Dr. W. R., London, England: 1 bird skin (139135, exchange).

**PARR**, Prof. A. E. (See under Yale University, Bingham Oceanographic Foundation.)

**PARR**, G. E., Mason, Nev.: 1 sample of diatomaceous earth from foothills of Sierras in Lyon County, Nev. (145985).

**PASARELL**, E. J., Ponce, Puerto Rico: 1 plant from Puerto Rico (144647).

**PASTUSHENKO**, J., Minneapolis, Minn.: 6 Ukrainian Easter eggs decorated by Mrs. William Dymanyk and Mrs. H. Pastushenko (147510).

**PATRICK**, Dr. LEON, Orange, Calif.: 1 Norfolk Island parrot (145229).

**PATTERSON**, Mrs. WAYNE, Columbus, Ga.: Archeological collection, 21 objects, from various sites in Lee and Screeven Counties, Ga., and from Russell County, Ala. (147411).

**PAUL**, Mrs. CARROLL, Marquette, Mich.: 131 mollusks from Ives Lake, Marquette County, Mich. (147128).

**PEARSE**, Dr. A. S., Durham, N. C.: 1 type platyhelminth (144557). (See also under Margaret C. Johnson.)

**PEARSON**, Prof. J. F. W. (See under University of Miami.)

**PECHUMAN**, L. L., Ithaca, N. Y.: 5 flies (4 species) (147304, exchange).

**PEEBLES**, R. H., Sacaton, Ariz.: 2 plants from Arizona (148547). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)

**PEEK & VELSOR, INC.**, New York City: 5 drugs for addition to the *materia medica* collection (147899).

**PENICK**, S. B., & Co., New York City: 5 drugs for the *materia medica* collection (147897).

**PENNINGTON**, C. F. (See under U. S. Department of Agriculture, Office of Experiment Stations.)

**PENNSYLVANIA AIRCRAFT SYNDICATE**, Philadelphia, Pa.: Model  $\frac{1}{16}$  size, of the Wilford gyroplane, recently made for the U. S. Navy, type XOZ-1, the first of its type to fly off water in America, October 3, 1936 (144374).

**PENNSYLVANIA STATE COMMISSION**: (Through Treasury Department, Bureau of the Mint) 2 Battle of Gettysburg commemorative half-dollars struck in 1937 (144287).

**PEREGRINE**, C. R., Alpena, Mich.: 27 crinoids from the Alpena limestone of Michigan (144451).

**PERKIN**, W. J., Glendale, Calif.: 5 samples of joaquinite from California (144530, exchange).

**PERKINS**, Mrs. F. W., Washington, D. C.: Ancient Roman coin struck during the reign of the Emperor Volusianus, 251-254 A. D. (146372).

**PERKINS**, S. E., 3d, Indianapolis, Ind.: 1 bat (145854).

**PERRY**, S. H., Adrian, Mich.: 4 complete meteorites, San Francisco Mount, Ariz., Woods Mount, N. C., Salina, Utah, Athens, Ala. (145943); 1 piece of the Andover meteorite (146415).

**PERRYGO**, W. M. (See under Smithsonian Institution, National Museum.)

**PESCHERET**, L. R., Whitewater, Wis.: 55 etchings in black and white and in color for exhibition March 28 to April 24, 1938 (147253, loan).

**PETIT**, M., St. Thomas, Virgin Islands: 3 fresh-water fishes taken in the "gut" on estate "Charlotte Amalie" "through the kindness of V. A. Miller and Dr. V. A. Christensen" (146056).

**PETRIDES**, G. A., Washington, D. C.: 100 fresh-water mussels, 23 land shells, 2 lizards, 20 insects, 13 land isopods, etc., from North Carolina (147957).

**PETROLAGAR LABORATORIES, INC.**, Chicago, Ill.: 3 4-by-7-inch colored half-tones of caricatures of world-famous men of medicine, Louis Pasteur, William Crookes, and Rudolph Virchow (146428).

PFLUGER, A. L., Miami, Fla.: 1 turtle (148447).

PHAIR, A. W. A., Lillooet, British Columbia: 1 harvest mite from Lillooet (147153).

PHILIP, Hon. HOFFMAN, Washington, D. C.: 1 silver studded leather mule collar from Ankober, ancient capital of Abyssinia (148085); 1 bronze sword from Tabriz, Persia, and an ancient Grecian glass tear bottle with original earth from excavation (148158).

PHILLIPPI, R. A., Santiago, Chile: 8 bird skins from Chile (146629).

PHILLIPS, Prof. N. E., College Park, Md.: 7 amphipods collected by G. N. Ackerman at Ellicott City, Md. (148202).

PHILLIPS, W. J., Winnipeg, Manitoba: 50 block prints in color and black and white for special exhibition October 4 to 30 inclusive, 1937 (145373, loan).

PHILLIPS & POWIS AIRCRAFT, LTD., Berks, England: Model, 1/16 size, of the Miles "Mohawk" airplane, a type in current use by Col. Charles A. Lindbergh. This model, gift of the makers of the original, reproduces features of the particular plane made for Col. Lindbergh (144982).

PICKENS, A. L., Atlanta, Ga.: 1 turtle from Paducah, Ky. (144425); a collection of termites made in Greenville County, S. C. (145129).

PIERCE, A. E. (See under City of Seattle.)

PIERCE, MARTHA N. and ANNA L., Washington, D. C.: Needlework square of floral design worked in a combination of wool cross stitch and bead embroidery on canvas during 1861 at Grand Rapids, Mich. (148296); 2 hand-woven coverlets, a linen and wool "overshot" weave, and a cotton-and-wool, double-weave, Jacquard type, made in 1834 by the lenders' grandfather, Silas Pierce, at his "East Bloomfield Factory" (near Rochester, N. Y.) for his daughter, Mary E. Pierce (148297, loan).

PIETROSKI, J. E., Dorchester, Mass.: 16 amphipods, 3 isopods, 3 parasitic copepods, and 1 flatworm (145361).

PILSBRY, Dr. H. A., Philadelphia, Pa.: 4 mollusks, topotypes of 2 species (146068). (See also under Academy of Natural Sciences.)

PITTIER, Dr. H., Caracas, Venezuela: 138 miscellaneous insects from Venezuela (111420); 473 plants from Venezuela (144405, 145148, 146070, 146643, 146732, 147398).

PITTS, W. B., Sunnyvale, Calif.: Several polished specimens of variscite, jasper, and other minerals from California (148428, exchange).

PIZZINI, ANDREW, Washington, D. C.: Approximately 35 isopods, 275 amphipods, and 3 barnacles from various localities in the District of Columbia, Virginia, and Pennsylvania (145751, 146807).

PLACE, Dr. P. W., South Lincoln, Mass.: German bugle taken by the French at the recapture of Fort Douamont in 1916 (145990).

PLAUMANN, FRITZ, Santa Catharina, Brazil: 238 Lepidoptera (140976, 145029); 31 frogs from Nova Teutonia, Santa Catharina, Brazil (146355, 146636).

PLUMMER, Mrs. C. E., Washington, D. C.: 1 Hungarian peach-stone carving (147260).

POMONA COLLEGE, Claremont, Calif.: Fragmentary plant from Utah (146694, exchange).

PORSILD, A. E. (See under Canadian Government, National Museum.)

PORTER, DR. CARLOS, Santiago, Chile: 17 miscellaneous insects from Chile (144152).

POST OFFICE DEPARTMENT, U. S., Washington, D. C.: 25 sets of specimen stamps, etc. (2,050 specimens) received by the Post Office Department from International Bureau of Universal Postal Union, Berne, Switzerland (144433, 144478, 144548, 145020, 145316, 145755, 145864, 146276, 146792, 147205, 147267, 147596, 147981, 148056, 148180); 3 U. S. Army 5-cent commemorative stamps and 3 U. S. Navy 5-cent commemorative stamps issued in 1937 (144296); 3 U. S. 3-cent stamps commemorating the Sesquicentennial of the Ordinance of 1787 (144596); 3 U. S. 5-cent stamps commemorating the birth of Virginia Dare (145363) 1 14-cent "Sibert" stamp, in use by the Canal Zone postal service (145392); 3 U. S. 3-cent Sesquicentennial of Constitution commemorative postage stamps (145547); 3 20-cent trans-Pacific air mail stamps and 3 50-cent trans-Pacific air mail stamps (145946); 3 3-cent Hawaiian commemorative postage stamps, 3 3-cent Alaskan commemorative postage stamps, 3 3-cent Virgin Islands commemorative postage stamps (146367).

POTTER, A. L., and A. R. TAYLOR, Fernandina, Fla.: About 205 specimens of archeological material collected at various sites in Ocala National Forest and vicinity, mostly in Marion County, Fla. (143952).

POTTER, E. C., Washington, D. C.: Ball of vegetable matter from Lindbergh Lake, Mont. (147094).

POUGH, Dr. F. H., New York City: 1 sample of bertrandite from Bedford, N. Y. (145936).

PRATT, A. J., Washington, D. C.: 1 Pathé projector head (147528).

PREBLE, E. A., Washington, D. C.: 1 ascidian from the coast of Massachusetts (144978).

PRICE, Dr. E. W., Washington, D. C.: 3 fishes from Costa Rica (145228); 9 fishes from Chitaldroog District, Mysore State, India, collected by Dr. V. N. Moorthy (145582).

PRICE, J. W., Lancaster, Pa.: 22 Cambrian fossils from Pennsylvania (146075).

Puerto Rico, UNIVERSITY OF, Mayaguez, Puerto Rico: (Through Dr. S. T. Danforth) 316 reptiles and amphibians from the West Indies (147388).

PUMP ENGINEERING SERVICE CORPORATION, Cleveland, Ohio: (Through Hank Miller) A group of 3 aircraft engine pumps, used with current types of aircraft engines and mechanisms and cut out to show operating parts (147271).

PURER, Dr. EDITH A., San Diego, Calif.: 47 plants from California and Baja California (144226, exchange).

QUAYLE, D. B., Vancouver, British Columbia: 4 shells (146739).

QUENSEL, Dr. PERCY. (See under University of Stockholm.)

QUESTEL, ADRIEN, Pointe-a-Pitre, Guadeloupe: 49 plants from St. Bartholomew (146563).

QUIRSFIELD, E. D., Hillsdale, N. J.: 1,157 weevils comprising 284 named species (145128).

QUISTORFF, ELMER, Seattle, Wash.: 3 larvae of frog from Icicle Creek, Chelan County, Wash. (146828).

RAGOT, C. L., New York City: 8 land shells from Long Island (144615).

RANDOLPH, Mrs. H. N., Charlottesville, Va.: 1 camera obscura and 1 drawing or reading table top, said to have belonged at one time to Thomas Jefferson (148291, loan).

RANSOME, Mrs. F. L., Pasadena, Calif.: Carved wooden panel from the ruins of the Church of San Francisco, Antigua, Guatemala (145250).

RASNICK, CHARLES, McLeod, Mont.: 1 young Clark's crow (147567).

RAU, Dr. WILLIAM, Rio Grande do Sul, Brazil: 26 plants from Brazil (148545).

RAWSON, G. W., Detroit, Mich.: 5 parasite type insects (147008).

RAY, Mrs. P. H., Philadelphia, Pa.: (Through Dr. E. F. Corson) 1 old Spanish garotte from the town of Manzanillo, Cuba, collected by Col. Patrick Henry Ray, U. S. V. (139193).

RAYMOND, Dr. P. E. (See under Harvard University, Museum of Comparative Zoology.)

RECORD, Prof. S. J. (See under Yale University, School of Forestry.)

REDDING, Mrs. R. W., Washington, D. C.: Embroidered cotton robe such as is worn by Mohammedan priests of West Africa, collected by the donor's husband while in West Africa (148559).

REED, Mrs. D. A., Springfield, Mass.: Gold medal awarded to the Duryea Motor Wagon Co. for "punctual arrival" in the (British) Motor Car Club London-Brighton Tour of 1896 (144538).

REED, F. C., Washington, D. C.: 2 specimens of radio apparatus and 1 hand-made ax handle (148300).

REEVES, J. E., Washington, D. C.: Model, 1/16 size, of the Queen Bleriot monoplane in which Earle Ovington flew mail during the first postal aviation demonstration in America, September 23-October 1, 1911 (148529).

REHDER, Prof. ALFRED, Jamaica Plain, Mass.: 1 mollusk from Hunan Province, China (145791).

REHN, J. A. G. (See under Academy of Natural Sciences.)

REICHERT, DAVID, Monticello, Fla.: 10 flies (144555).

REID, E. D., Washington, D. C.: (With Dr. G. S. Myers) 175 fishes, 8 amphibians, and 4 crayfishes, collected in central Virginia, May 1933 (144590); 986 fishes, 4 salamanders, 2 crayfishes, and 2 jars of mollusks, collected September 1933 in western Virginia and North Carolina (144592). (See also under Dr. L. P. Schultz and Smithsonian Institution, National Museum.)

REINHARD, H. J., College Station, Tex.: 12 insects (146935, 147317).

REINVALD, I., Talinn (Reval), Estonia: 9 meteoric and related specimens from the Oesel Crater, Estonia (147091, exchange).

REMPEL, Prof. J. G. (See under Cornell University.)

RENFRO, Mrs. J. H., Fort Worth, Tex.: A collection of Comanchean echinoderms from Texas (146339, exchange).

REPETEK SAND DESERT STATION, Repetek, Turkmenistan, U. S. S. R.: 108 plants from Central Asia (144602, exchange); 105 plants from Turkmenistan (146014, exchange).

REQUEENA, RAFAEL AND ERNESTO FRANCO, Washington, D. C.: 2 mollusks (146404).

RESNER, ERNEST, Washington, D. C.: 2 tadpoles and 1 salamander from Hillsboro, N. C. (145359).

RESSER, Dr. C. E., Washington, D. C.: 1 fresh-water sponge from Ausable Chasm, N. Y., collected by Fred Rock (145390). (See also under Smithsonian Institution, National Museum.)

RETTINGER, Mrs. JOHN, East Orange, N. J.: Sword carried during the Civil War by Gustave A. Hoffman, 2d Lieut., 45th Regiment, New York Volunteers, and G. A. R. badge owned by him (14693).

REYNOLDS, Prof. B. D., University, Va.: 1 slide (topotype) of parasitic worm (146115); 1 type parasitic worm (145986).

RHODE ISLAND STATE DEPARTMENT OF AGRICULTURE, Providence, R. I.: 2 insects (14594); (through A. E. Stene) 3 fragmentary beetles from Rhode Island (146706).

RHOADES, WILLIAM, Indianapolis, Ind.: 1 plant (147580).

RICE, A. P., Wellesley, Mass.: 16 land, fresh-water, and marine shells from Yucatan (145857).

RICHARDS, Mrs. F. B., South Lyndeborough, N. H.: 2 ferns (145884).

RICHARDS, R. D., Wellsville, N. Y.: (Through Mrs. Winifred Flavelle) A complete trilobite from the Hamilton group at Danville, N. Y. (145298).

RICHMOND, UNIVERSITY OF, Richmond, Va.: 55 miscellaneous insects (142546).

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE, Leiden, Netherlands: 1 bird (147951, exchange).

RILEY, J. H., Washington, D. C.: 1 mourning dove (148438).

ITCHER, Dr. P. O. (See under Kentucky Agricultural Experiment Station.)

ROBA, RENE-PAUL. (See under Federacion Nacional de Cafeteros de Colombia.)

ROBERTS, C. C., Lagos, Nigeria: 41 ethnological specimens of cast brass, carved wood, and wrought iron from West African tribes (147262).

ROBERTSON, Mrs. IMOGENE C. (See under Buffalo Museum of Science.)

ROBINSON, J. F. (See under Alabama Polytechnic Institute.)

ROBINSON, MARK, Philadelphia, Pa.: 21 beetles (146816).

ROBSON, Mrs. E. D., Ancon, Canal Zone: 5 porcellanid crabs, 7 amphipods, 2 pycnogonids from Pacific end of Panama Canal and Miraflores Locks (145190).

ROCKEFELLER FOUNDATION, *International Health Division*, New York City: (Through Dr. H. W. Kumm) 4 insects (144469).

ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH, Princeton, N. J.: 1 harvest mite from near Princeton (144979).

RODDY, Prof. H. J., Lancaster, Pa.: 10 Silurian fossils from Gunther Valley, Pa., a sample of banded Cambrian limestone from near Manheim, and a sample of Devonian Stromatopora from Landisburg, Pa. (146073).

RODRIGUEZ, Prof. R. V., San Jose, Costa Rica: 1 fossil echinoid from Turrucares de Alajuela, Costa Rica (146545).

ROEBLING FUND, Smithsonian Institution: 1 meteorite from Puripica, Antofagasta, Chile (115273); the Plantersville, Tex., stony meteorite (135495); 1 end slice of the Adrian, Texas, meteorite (144415); 3 mineral specimens, cassiterite, ahlfeldite, and metastibnite, from Bolivia (144559); 5 meteorites, Shaw, Colorado, Miami, Texas (stone), Horse Creek, Colo., Doyleville, Colo. (stone), and Brownfield, Tex. (145153); exhibition minerals from the lead and zinc areas of Rumania (145326); 1 rough diamond crystal from California (145391); 1 slice of the Kelly, Logan County, Colo., meteorite (145770); 5 rough diamonds and 1 jade boulder (145870); 1 diamond crystal from Oregon and 1 scorodite specimen from Algeria (146030); 1 specimen of stephanite from Freiberg, Germany (146265); 4 specimens of uranium-vanadium minerals from Colorado (146271); 3 meteorites, Haviland, Kiowa County, Kans., Township 7, Lincoln County, Colo., and Holly, Colo. (146353); 1 specimen of smaltite from Pihuamo, Jalisco (146649); 1 lot of variscites and associated phosphate minerals from Fairfield, Utah (146652); 5 slices of meteorites, Ladder Creek, Greeley County, and Smith County, Kans.; Broken Bow and Hildreth, Nebr.; and Texline, Tex. (146805); 1 stony meteorite from Beenham, Union County, N. Mex. (147184); 7 specimens of gudmundite and various other minerals from Sweden and other localities (147523); 1 meteorite from Rolla, Kans. (147602); 1 specimen of thortveitite from Norway (148017); 4 fluorite samples from Rabenstein Mine, Sarnthai Province of Bolzano, Italy (148288); (with Ward's Natural Science Establishment) 1 slice of the Santa Maria meteorite (146466).

ROGERS, H. M., Toronto, Ontario: 5 amphipods (146323); 1 shrimp (146627).

ROHWER, S. A., Washington, D. C.: 1 brown thrasher from Arlington, Va. (148047).

ROLLER, JANE, Washington, D. C.: 139 fishes from Maryland and Virginia collected during the summer of 1937 by donor and others (145542); 30 fresh-water fishes from Columbus County, N. C., collected by donor (147889).

ROLLINS COLLEGE, Thomas R. Baker Museum, Winter Park, Fla.: 19 shells from Lake Virginia (Ardmore), Winter Park, Fla. (147073).

ROLLS ROYCE, LTD. (See under Vickers (Aviation, Ltd.)

ROMINGER, MARIE, Ann Arbor, Mich.: 8 examples of ornamental hair work of the type fashioned by hand between 1850 and 1880 (147361).

ROOSEVELT, Mrs. EDITH K., and F. J. OWEN: (Through R. E. Cropley) 9 loose-leaf volumes of scrapbook data on sailing vessels to be combined with 4 volumes of material on sailing vessels previously presented by R. E. Cropley (145352).

ROOSEVELT, President FRANKLIN D., Washington, D. C.: A small portraiture model of the S. S. *Leviathan* made and presented to the donor for the national collections by R. E. Cropley (147985); 1 specimen of tuna said to have been caught off Bank, Caicos Island, West Indies (148153).

ROSENGURT, BERNARDO, Montevideo, Uruguay: 160 plants from Uruguay (144026, 144990, 145886, 146749, 147941).

ROSS, HARRIET, Crest Hall, Nantucket Island, Mass.: Blue-and-white, double-weave Jacquard coverlet in pattern "Lady's Fancy," "Lois Burnham-Jacob Impson-1834-Cortland Village" woven in corner (144578).

RUEPING, Mrs. F. J., Fond du Lac, Wis.: 2 small pen drawings by Edward Moltor, "Indian, 1878" and "Germania, 1880" (147035).

RUKOFF, T. B., Takoma Park, Md.: 1 plant from Virginia (147947).

RUNYON, ROBERT, Brownsville, Tex.: 55 plants from Texas (144286, 145519).

SABROSKY, C. W., East Lansing, Mich.: 1 fly (147417).

SAMELIUS, W. H., Elgin, Ill.: Watchmaker's dial gauge and adjustable pliar (145222).

SAMUEL, Chaplain JOHN, Alpena, Mich.: 1 rare crinoid from the Devonian of Michigan (148289, exchange).

SANCHI, Dr. F., Kairouan, Tunis: 20 vials of ants, being 20 species from Africa (147623, exchange).

SARGENT, F. H., Washington, D. C.: 217 plants from Puerto Rico (146717).

SAVELY, H. E., Durham, N. C.: 25 miscellaneous insects (146573).

SCARAMUZZA, L. C. (See under Estacion Experimental Agronomica.)

SCHAFFNER, H. R. (See under Smithsonian Institution, National Museum.)

SCHAFFNER, Mrs. O. G. (See under Mary Harter.)

SCHAFFNER, J. V. (See under U. S. Department of Agriculture, Forest Service.)

SCHIFFER, Dr. V. B., Washington, D. C.: 1 abdomen of a spiny lobster from South Africa (147057).

SCHLESCH, Dr. HANS, Copenhagen, Denmark: 63 mollusks from Europe (145837).

SCHMID, E. S., Washington, D. C.: 1 Salvin's parrot, 1 lovebird, and 1 masked lovebird (145227, 145266, 146343).

SCHMIERER, Prof. TH., Berlin, Germany: 54 recent and interglacial land mollusks from Germany (144502).

SCHMITT, KARL, and R. G. SLATTERY, Washington, D. C.: 6 teeth and 8 bones of elk and 1 broken mandible of bear collected in Loudoun County, Va., near Selden Island, from Indian village sites (148542).

SCHMITT, Dr. W. L., Washington, D. C.: 9 isopods, 1 earthworm, mollusks, 10 myriapods and insects, collected in Virginia (146006). (See also under Smithsonian Institution-Hartford Expedition.)

SCHNECKENBURGER, M. G., East Aurora, N. Y.: 2 multispeed camera shutters (145931).

SCHOEDLER, LILLIAN. (See under Estate of Edward Filene.)

SCHOFF, H. L., Canandaigua, N. Y.: 2 earthenware vessels (in small fragments) from "Oak Hill," site of Mohawk village Te-no-to-ge, West of Fort Plain, N. Y. (125062).

SCHONBERGER, CLINTON, Grand Forks, N. Dak.: A collection of insects (145017).

SCHULTZ, Dr. L. P., Washington, D. C.: 1,611 fishes, 2 jars of insects, and 2 tadpoles from the Yellowstone National Park, Wyo., (144375); (with E. D. Reid) 78 fishes, 1 jar of crustaceans; and 1 jar of tadpoles collected in Zekiah Swamp, La Plata, Md. (144458); 153 fishes, 2 crawfishes, 1 salamander, and 1 insect collected at Clarks Run near Bel Alton, Md. (144460). (See also under Smithsonian Institution, National Museum.)

SCHULZ, Mrs. J. W. N., Washington, D. C.: 1 hand-woven cotton-and-wool coverlet with Jacquard pattern in a John Mellinger design, bearing the name "Franz Rether" and the date "1844" in the lower end corners (144500, loan).

SCHWARZ, Dr. E., Washington, D. C.: 1 mollusk from Chevy Chase Lake, Md. (147565).

SCOLICK, Mrs. J. W., Washington, D. C.: Skeletal material comprising 12 mammals and 9 birds (147312).

SCOTT, MILTON, Miami, Fla.: 141 wood samples of native and introduced trees of Florida, backed by plant material in the Buswell Herbarium, University of Miami (148558, exchange).

SCULLY, Dr. F. J., Hot Springs, Ark.: 91 plants from Arkansas and Western United States (146422).

SEATTLE, CITY OF, *Department of Public Works*, Seattle, Wash.: (Through A. E. Pierce) 1 cable car operated at Seattle from 1889 to 1916, with rail, yokes, cable, and other parts required to prepare a complete exhibit (145720).

SEBASTIEN, E., St. Thomas, Virgin Islands: 2 shrimps from St. Thomas (145331).

SEIFRIZ, Prof. WILLIAM, Philadelphia, Pa.: 5 plants (144217).

SELBY, JOHNNY and TOMMY, and BILLY LAMBERT, Washington, D. C.: 1 black-snake from Edgemore, Md. (147234).

SERVICO DE BOTANICA E AGRONOMIA, São Paulo, Brazil: 15 plants from Brazil (148553, exchange).

SETZLER, F. M. (See under Smithsonian Institution, National Museum.)

SHANNON, Mrs. CAROLINE W., Chevy Chase, Md.: (Through T. J. Shannon) A clinical thermometer, a surgical probe, and a combined toothpick and earpick for addition to the Wolfley collection of medical relics (144658); 32 pieces of needlework, framework, crocheted, knitted and tatted work, made before the Civil War by members of the Wolfley family; stitchery tools, a Paisley scarf and ribbons of 1860; and small pieces from silk dresses of the early eighteenth century (145752).

SHANNON, T. J., Chevy Chase, Md.: 1 early valentine (lace paper and flowers), 1 announcement card (plain embossed and lettered), 1 novelty card (History of England), and 1 writing paper holder (hand colored and inlaid) (145264). (See also under Mrs. Caroline W. Shannon.)

SHARP & DOHME, INC., Philadelphia, Pa.: Mounted sections of the skin of 7 poisonous snakes, copperhead, timber rattler, Pacific rattler, diamond-backed rattler, water moccasin, coral, and massasauga, for use in the antivenom exhibit (148156).

SHARSMITH, Dr. C. W. (See under State College of Washington.)

SHATTO, R. P., Hagerstown, Md.: Fragment of a commemorative cotton print with small portrait medallions, showing a uniform suggestive of that worn by Gen. Andrew Jackson and said to date from 1829 (145627).

SHEAR, Dr. C. L., Washington, D. C.: 4 plants from Virginia (146029).

SHEARMAN, T. G., Washington, D. C.: 31 pieces of Ojibwa beadwork, consisting of pouches, leggings, moccasins, and beaded bands (145302).

SHELDON, G. L., El Paso, Tex.; 1 sample of iron dendrite from New Mexico (145599).

SHELDON JACKSON MUSEUM, Sitka, Alaska: (Through J. H. Condit) 1 small lot of wood-boring beetles (144547).

SHENEFELT, R. D., Pullman, Wash.: 8 Hymenoptera, representing holotype of 1 species, holotype, allotype, and 4 paratypes of 1 species, and 1 specimen of a third species (144447).

SHERWIN, C. A., Westmoreland Hills, Md.: 5 bookplates (the work of the donor): Hugh William Mahon, Constitution Sesquicentennial, Eleanore Wilson and Frank Smith, Thomas Lincoln Casey Library, and Bess Hacket (148561).

SHIGLEY, W. W., Sioux Falls, S. Dak.: 1 electric switch from the first trans-ocean aircraft, the *NC-4* (148560).

SHILSTONE, E. M., Bridgetown, Barbados, British West Indies: 15 shell celts, disk, etc., 5 potsherds and a skull and partial skeleton of a Negro from a midden at Chancery Lane, South Coast, Barbados (145959).

SHIPMAN, F., Baltimore, Md.: Ethnological collection consisting of an African zanza, a Zulu knob-kerri club, and an English church warden clay pipe (145560).

SHOEMAKER, C. R., Washington, D. C.: 1 ovenbird (145267); about 40 amphipods and 2 isopods from Grays Cypress Swamp, Md. (147533).

SHOUP, Mrs. M. G., Washington, D. C.: 6 shells from Long Beach, Calif. (145579).

SIMON, Prof. FELIX, Laramie, Wyo.: 1 type slide of parasitic insect (146615); 2 type specimens of nematodes (147165).

SMISON, A. G. (See under Carl Herin.)

SITSCH, ADOLF, Radomys'l nad Sanem, Poland: 426 mollusks from Poland, Czechoslovakia, Bukowina, and Rumania (145740, exchange).

SKUTCH, DR. A. F., Santa José, Costa Rica: 267 plants from Costa Rica (146013).

SLATER, PROF. J. R., Tacoma, Wash.: 2 lots of tadpoles from Tacoma (144527).

SLATTERY, R. G., Washington, D. C.: Partial remains of an elk, consisting of 2 teeth and jaw fragment, and 9 bone fragments, collected 4½ miles southwest of Poolesville, Md. (148172). (See also under Karl Schmitt.)

SLAYBAUGH, EDITH, Washington, D. C.: 9 family portraits, comprising 4 tintypes, 3 ambrotypes, and 2 daguerreotypes, together with 4 cartes-de-visite (145364).

SLEUMER, DR. H. (See under Botanisches Museum.)

SLOSS, DR. L. L., Chicago, Ill.: 19 Devonian corals and 24 celluloid peels from Petoskey, Mich. (144452).

SMITH, AUSTIN, Zarcero, Costa Rica: 75 plants from Costa Rica (147913).

SMITH, ELIZABETH T., Evanston, Ill.: 5 isopods (145974).

SMITH, DR. H. M., Washington, D. C.: 5 fishes and 1 air bladder from Buzzards Bay and Woods Hole, Mass. (145367); 61 otoliths from fishes (145836); 1 oyster shell in a pipe from Chesapeake Bay (146004); 1 set of pharyngeal teeth, collected at Doi Augka, Siam (146144). (See also under U. S. Department of Commerce, Bureau of Fisheries, and Indian Museum.)

SMITH, MRS. H. M., Washington, D. C.: 1 piece of American tatting in linen thread and 1 sachet box holder of ornamented chamois skin (147527).

SMITH, J. L., Chester, N. Y.: 9 fossil plants and 40 invertebrates from the Devonian of eastern New York and Pennsylvania (145861).

SMITH, MAXWELL, Lantana, Fla.: Paratypes of 7 species of mollusks from the Pliocene of Florida (146153).

SMITH, DR. M. R., Washington, D. C.: 15,000 ants, including type material of about 30 species (146304).

SMITH, O. E., Miami, Fla.: Indian bridle of plaited buffalo hair, collected about 1872 at Muskogee, Indian Territory (138114).

SMITH, R. T. (See under Washington State Department of Fisheries.)

SMITHSONIAN-HARTFORD EXPEDITION:

About 4,500 marine invertebrates, chiefly Crustacea and bottom samples, together with 2 mammals, a few amphibians, 973 fishes, 17 insects, 223 mollusks, some echinoderms, about 35 jars of marine algae, several fossils and minerals collected in the West Indies, March, April, and May 1937 by Dr. W. L. Schmitt, Smithsonian Institution, and G. R. Lunz, Jr., Charleston Museum (142536, collected for the Museum).

SMITHSONIAN INSTITUTION: 1 line engraving on copper entitled "Approach of Spring," by Thomas Nason (146326, deposit); 15 European coins collected by Dr. A. Wetmore (148442, deposit); 1 gas lighter and piece of medieval tapestry (148091, deposit); (through Dr. A. Wetmore) 8 Venezuelan coins struck in 1935-36 (146143, deposit).

Bureau of American Ethnology: 1 earthenware water jar from the Pueblo of Acoma and 1 decorated basket made by the Aleuts of southwestern Alaska (144343); 3 figurine pottery fragments and 3 figurine pottery heads from a railway cut near the Aguan River, Maloa District, northeastern Honduras (146287); 6 potsherds, arrowpoints, shell beads, and fragments of worked shell from Liberty and Dade Counties, Fla., collected by M. W. Stirling (146639); earthenware vessel and fragments from Ulua River, Comayagua River, and Lake Yojoa regions of Honduras, collected in 1936 by the Smithsonian-Harvard University Expedition under the direction of Dr. W. D. Strong (148063).

National Museum, collected by members of the staff: Aschemeyer, C. R.: 23 turtles from Florida (147066, 147067, 147138); 1,862 fishes, 3 alcoholic turtles, shells, reptiles, Crustacea, collected in Florida, March 1938 (147156). Bartsch, Dr. Paul: 1,000 mollusks, 3 jars of fishes, 3 jars of crayfishes, 3 bottles of worms, 1 bottle of Bryozoa and 1 bottle of insects, from experimental cages at Roaches Run and Fort Belvoir, Va., October 1937 (147311). Cooper, Dr. G. A., and P. E. Cloud: About 40,000 invertebrate fossils from the Devonian rocks of Michigan, collected during field trip June 2 to July 1, 1937 (144450). Gilmore, C. W.: Approximately 50 reptiles, fishes and mammals from the 1937 paleontological expedition to Utah

and Arizona (145248). Henderson, E. P.: A collection of minerals, rocks, and ores obtained during the summer of 1937 while on excursions with International Geological Congress in Russia (148099). Hrdlička, Dr. Aleš: Collection of skeletal and cultural material from Alaska together with natural-history material comprising geological material, mammals, birds, mollusks and marine invertebrates collected during the summer of 1937 (143191). Leonard, E. C.: 634 plants, mainly lower cryptogams from the Bull Run Mountains, Va. (148301). Maxon, Dr. W. R.: 95 plants, mainly ferns, from Florida (146432). Perrygo, W. M. (with Carleton Linge-bach): 745 bird skins, 8 bird skeletons, 2 alcoholic birds, 234 mammals, 657 mollusks, 96 reptiles, 10 marine invertebrates, 8 myriapods, collected in Tennessee during April-July 1937 (144589); (with H. R. Schaefer) 311 birds, 73 mammals, 14 turtles, and a collection of mollusks from Tennessee, collected during September and November 1937 (145378). Resser, Dr. C. E.: 415 Paleozoic invertebrate fossils from various localities in New York, Vermont, and Quebec (145531). Schultz, Dr. L. P., and E. D. Reid: 6,814 fishes and 3 vials of post-larval fish, 35 mollusks, approximately 40 crayfishes, several amphibians and reptiles, some beetles, 1 spider and 1 centipede (144536). Setzler, F. M.: 1 soft-shelled turtle from Texas (147955). Wetmore, Dr. A.: 427 skins and 17 skeletons of birds from Venezuela (146332).

*National Museum, obtained by purchase:* 297 skeletons of birds (144298); 1 Ordovician starfish from New York (144318); 46 bird skins and 11 sets of eggs from Brazil and 2 ruffed grouse from Wisconsin (144421); about 100 Devonian invertebrate fossils from Ontario (144422); 2 skins and 1 skeleton of mammals from Batouri District, Cameroons (144541); 650 plants from northern Mexico (145033); 438 plants from the eastern Mediterranean region (145141); 17 small mammals from the Philippine Islands and Japan (145208); 56 reptiles and amphibians, and 1 spider from Mount Chimborazo, Ecuador (145314); 2 skins of the Iceland mallard (145413); 2 bird skins from Alaska (145603); 19 birds from Rhodesia, South Africa,

7 forms new to the Museum (145838); 283 plants, collected in South America by Mrs. Ynes Mexfa (146020); 2 mounted raccoons (146060); 542 plants from Brazil (146080); 1 fossil ganoid fish from the Jurassic?, Texado formation, Jervis Inlet, British Columbia (146121); 1 mule from East Radford, Montgomery County, Va. (146335); 4 exhibition specimens of Devonian trilobites from Sylvania, Ohio (146553); 36 bird skins from Angola (146584); 2 bird skins from Alaska (146804); 1 "Wahoo" fish collected in rocky holes off Hillsboro Inlet, Fla. (147171); 1 northern white pine plank, from a tree felled in the Adirondack Mountains near Bay Pond, N. Y. (147215); 10 bird skins new to the collection (148140); 55 plants from Colombia (148415).

*National Museum, made in the Museum laboratories:* 3 casts of stone mace found near Pearl, Pike County, Ill., original owned by J. F. Jarrell, Longmont, Colo. (145089); 18 plaster casts made from 5 prehistoric Eskimo specimens, all the property of the Museum (145543); 2 painted plaques illustrating aeronautic insignia, 1 being that believed to have been used by the American Civil War Balloon Corps, the other used by American Naval Aircraft of about 1916 (148565).

*National Zoological Park:* 1 horseshoe crab (144313); 50 fishes from Zoo aquarium (144499, 146069); 27 birds, 1 alcoholic (145006); 92 mammals (145303, 145650, 145775, 145919, 146087, 146431, 146605, 147170, 147958, 148430); 201 birds, comprising skins and skeletons (145648, 145848, 146710, 148154); 66 reptiles from various localities (148395).

*SOCIETY FOR VISUAL EDUCATION, INC., Chicago, Ill.:* 3 strip films entitled "Red Blood," "Young Strongheart," and "Pre-School Days of Betty Jones" to supplement the public health exhibits (148087).

*SOPER, A. W., Bothbay Harbor, Maine:* 10 Lepidoptera from Japan (148096). *SOUTHERN PACIFIC CO., San Francisco, Calif.:* 1 model of the Southern Pacific Co.'s new 4-8-4 type of stream-line steam locomotive and tender (144456).

*SOUTHWORTH, CHARLES, Thedford, Ontario:* 1 small collection of cystids and Bryozoa from the Middle Devonian of Thedford (144430).

SOXMAN, G. M., Dallas, Tex.: 3 ferns from Texas (144521); 5 ferns from Texas (146632, exchange).

SPANGLER, Mrs. FLOYD, Fulton, N. Y.: 1 sample of plain weave, bleached cotton, printed in purple from an engraved plate, design "Multiplication table" showing one unit of repeat, 12½ inches by 10½ inches, 1 selvage edge and 3 unfinished edges (146680, loan).

SPAWN, WILLMAN, Washington, D. C.: 5 ferns from West Virginia (145497); 3 plants from Virginia and Maryland (146597, 148294).

SPENCER, Dr. A. C., Washington, D. C.: 5 ferns from Colorado (144624, 144653).

SPERRY, GRACE H. (See under John L. Sperry.)

SPERRY, J. L. and GRACE H., Riverside, Calif.: 15 Lepidoptera (12 species) (146820); 55 Lepidoptera (147458, exchange).

SPERRY, Dr. O. E., Alpine, Tex.: 415 plants from Texas (144529, 144967, 145170, 145799, 145839, 146468, 146563).

SPRINGER FUND, Smithsonian Institution: 8 blastoids and crinoids from the Devonian of Ontario, Canada (144558).

SPRINGER, STEWART. (See under the Bass Biological Laboratory.)

STAATS, FRED, Salt Lake City, Utah.: 3 samples of rhodochrosite from Nevada (145601).

STAIDNICHENKO, Miss M., Negritos, Peru: A collection of Tertiary Crustacea and Mollusca from South America (145256).

STANLEY, J. E., West Seattle, Wash.: (Through Dr. A. Hrdlička) Feather cape made in the Arctic by Alaska Eskimo (147261).

STANFORD UNIVERSITY, Stanford University, Calif.: 1 fish, paratype (146138, exchange).

STANLEY, H. H., Cortez, Colo.: 3 mollusks from hills near Cortez, Colo. (145607).

STATE MICROSCOPICAL SOCIETY OF ILLINOIS, Chicago, Ill.: (Through Dr. Vida A. Latham) 6 small lots of samples with microscopic fossils from Australia (147086).

STAUFFER, Dr. C. R., Minneapolis, Minn.: 7 brachiopods from the Devonian of northern Iowa (145968, exchange).

STAVES, C. M., Pasadena, Calif.: Grooved stone ax found about 1878 near Shueyville, Iowa (144445).

STEARN, F. A., San Francisco, Calif.: 2 packages of sulphur matches, known locally as "Chinese" or "Bunch matches," manufactured by the Metropolitan Match Co., San Francisco (145182).

STEARN, Dr. H. T. (See under U. S. Department of the Interior, Geological Survey.)

STEBBINS, Dr. G. L. Jr., Berkeley, Calif.: 1 plant from China (147212). (See also under University of California.)

STEHLÉ, Dr. H., Pointe-a-Pitre, Guadeloupe: A collection of plants from Guadeloupe (144569); 543 plants from Martinique and Guadeloupe (145281, 145642, 146451, 146616, 146696).

STEIDLE, G. W., Jr., Washington, D. C.: Blue and red, cotton and wool single weave, Jacquard coverlet, with "rooster" border, bearing the date "1839," and the names "John Kauffman" and "Samuel Moyer" in the lower end corners (145933).

STENE, A. E. (See under Rhode Island Department of Agriculture and Conservation.)

STEPHENSON, Dr. B. S. (See under Dr. N. W. Stephenson.)

STEPHENSON, G. M., South Bend, Ind.: 1 shrew (146456).

STEPHENSON, Dr. N. W., Dr. B. S. STEPHENSON, Mrs. JOSEPHINE BURDETTE, and Dr. S. S. STEPHENSON, Wilmington, N. C.: 36 Peruvian vessels mostly from ruins of Chanchan, Trujillo Valley, State of Libertad; others from Cuzco and Puno (144585).

STEPHENSON, Dr. S. S. (See under Dr. N. W. Stephenson.)

STEVENS, HENRY, Washington, D. C.: 2 "Recorder" exposure records, a system of recording time and stop for 36 photographic exposures (145304).

STEVENS, Prof. O. A. (See under North Dakota Agricultural College.)

STILLINGER, RICHARD, Spokane, Wash.: 125 plants from Idaho and Washington (146400, 147232).

STOCKHOLM, UNIVERSITY OF, Stockholm, Sweden: 16 lithium pegmatite minerals from Varutrask, Sweden, collected and described by Dr. Percy Quensel (144620, exchange); (through Dr. Percy Quensel) 1 specimen each of the minerals varulite and alluvanite from Sweden (145614, exchange).

STONEBREAKER, Mrs. LAURA C., Hyattsville, Md.: 1 "Album" or "Autograph" quilt appliqued in calicoes of the same shade of red, made in Harrisburg, Pa., 1849, 1851, by friends of Ellen Winebrenner Calder (grandmother of the donor), and presented to her at the time of her sailing with her husband, Rev. James K. Calder, as missionaries to China, also a

daguerreotype made in 1849 of Rev. and Mrs. Calder (144655).

STRIMPLE, H. L., Bartlesville, Okla.: 34 samples of Pennsylvania brachiopods from Oklahoma (145929); a collection of about 60 crinoids from the Pennsylvanian (Dewey limestone) from Dewey, Okla. (147890, exchange).

STRIMPLE, Mrs. MELBA, Bartlesville, Okla.: A collection of Pennsylvanian cephalopods, brachiopods, and Bryozoa from Oklahoma (146566).

STRUINGER, WALTER, Chicago, Ill.: Gilt token commemorating the centennial anniversary of the Peacock Jewelers, Chicago, 1937; and a note for 50 centavos issued by the State of Sinaloa, Mexico, 1915 (144657).

STUART, W. W., Des Moines, Iowa: Early domestic electric refrigerating apparatus including a complete early Frost-Maker unit, an aluminum cut-away model of an Isko gear pump, an actual Isko gear pump and 8 round bottom ice freezing cups (145769); automobile magneto from early Dusenberg racing car, and a separate gear pump unit from a Frost-Maker refrigerating machine (147408).

STUNTZ, S. C., Washington, D. C.: 1 mole (148014).

STUPKA, ARTHUR. (See under Interior Department, National Park Service.)

SULLIVAN, Prof. J. M., Jackson, Miss.: 1 type specimen of alecyonian from the Eocene of Mississippi (146076, deposit).

SUMMERLAND, S. A., Vincennes, Ind.: 9 beetles (144794).

SWALLEN, J. R. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

SWASEY, Dr. AMBROSE, Cleveland, Ohio: (Through W. J. Henderson) 2 carved ivory tusks, southeastern Asia (146266).

SWEITZER, F. W., Glen Echo, Md.: 1 early type of pharmaceutical hand balance with 4 weights (145287).

SWEZEE, O. H. (See under Hawaiian Sugar Planters' Association.)

SYDNEY, UNIVERSITY OF, Sydney, New South Wales: (Through Dr. G. S. Lightoller) 1 Jerboa mouse, 1 rat, and 1 bat (147937, exchange).

SYRACUSE UNIVERSITY, Syracuse, N. Y.: 15 specimens of trilobite from Morrisville, N. Y. (146738, exchange).

TAGAWA, Dr. M. (See under Kyoto Imperial University.)

TAILLANT, MONTAGUE, Manatee, Fla.: 9 pottery vessels and fragments from a sand burial mound on a small unnamed island in Gasparilla Sound, Charlotte County, Fla., near the town of Placida (146689).

TANG, Dr. CHUNG-CHANG, Foochow, China: 100 mollusks from China (144360).

TARANETZ, A. J. (See under Pacific Scientific Institute of Fisheries and Oceanography.)

TARBOX, F. G., Jr., Georgetown, S. C.: 7 plants from South Carolina (147343).

TARKOFF, ISAAC, Oakland, Calif.: 1 gold medal presented posthumously to Wendell Tarkoff, the donor's son, as second prize for an essay in the Mount Rushmore National Memorial Inscription Contest (147830).

TARR, Prof. W. A., Columbia, Mo.: (Through L. M. Neumann) 1 meteorite from near Alva, Woodward County, Okla. (144367).

TARSICIO, Prof. HERMANO. (See under Colegio de la Salle.)

TARTU UNIVERSITY, Botanical Museum, Tartu, Estonia: 50 plants from Estonia (148009, exchange).

TAYLOR, A. R. (See under A. L. Potter.)

TAYLOR, H. H., Miami, Fla.: Shrunken head of an infant, Jivaro Indians, South America (145800).

TAYLOR, Hon. J. C. (See under R. F. Vaughan.)

TECHNISCHE HOOGESCHOOL, Delft, Netherlands: 274 invertebrate fossils (140 species) from Permian and Mesozoic rocks of Timor (141477, exchange).

TELEPHONE CAMERA CLUB OF MANHATTAN, New York City: 43 pictorial photographs for special exhibition during March 1938 (147034, loan).

TEN EYCK, E. H., Liverpool, N. Y.: Pair of oars used by the donor in winning the Diamond Sculls at the Henley (England) Royal Regatta, 1897, in the racing shell now exhibited in the Museum (147301).

TENNESSEE, UNIVERSITY OF: Knoxville, Tenn.: 1 plant from Puerto Rico (146562, exchange).

TENNESSEE VALLEY AUTHORITY, Knoxville, Tenn.: (through Dr. A. R. Cahn) 4 insects from Tennessee (145012); (through Dr. C. L. Hubbs) 132 fishes from the Tennessee Valley drainage in Alabama (144290); 272 fishes from Tennessee collected by L. F. Miller (146590).

TEXAS, UNIVERSITY OF, Austin, Tex.: 10 ferns from Texas (145952); 26 specimens (12 species) and 3 casts of fossil crustacea (146575); 14 ferns from Mexico (147005); (through Mrs. Agnes Chase) 6 plants (sedges) collected in Mexico by Mary T. Edwards (148168).

TEXAS CENTENNIAL COMMISSION, U. S.: Dallas, Tex.: 3 oil paintings of fossil reptiles, 1 fossil skeleton, and 1 fossil (146085).

THAANUM, Dr. D., Honolulu, Hawaii: 24 lots of marine shells from the Hawaiian Islands (145252); 29 lots of Hawaiian marine shells (145559); 33 lots of marine gastropod mollusks, from Hawaii (146005); 158 mollusks from Hawaii (146135).

THOMAS, J. L. (See under Highway Engineering and Construction Co.).

THOMPSON, J. W., Seattle, Wash.: 400 plants from Washington (146436, exchange).

THOMPSON, W. A., Baltimore, Md.: Contemporary model of an open steam launch, European, of about 1875, name "Trio" (147410, loan).

TIMBERLAKE, P. H., Riverside, Calif.: 2 beetles, paratypes (147216).

TING, P. C., Sacramento, Calif.: 16 species of coleopterous larvae, all of which except 3 species are new to the collection, also 13 adult Coleoptera, representing 12 species (145388); reared caterpillars of 6 species of Lepidoptera, reared larvae of 4 species of Tipulidae, 40 adults of miscellaneous insects, 1 vial of chilopods, 1 fish and 7 vials of marine invertebrates (147308); 104 beetles, including adults, larvae and pupae (148293, exchange). (See also under California Department of Agriculture and California Academy of Sciences.)

TINKLE, Dr. W. J., Upland, Ind.: (Through Dr. M. W. Lyon, Jr.) 1 pigmy short-tailed shrew (146393).

TISSOT, Dr. A. N. (See under University of Florida.)

TOLMAN, R. P., Washington, D. C.: 1 "Nupastel" color drawing by donor, entitled "Moonlight on the Chesapeake" (146600).

TONLIMON, W. H., Swarthmore, Pa.: 1 each of the minerals harmotome, autunite, montmorillonite from Pennsylvania (145528).

TONNOIR, Dr. A. L., Canberra City, Australia: 24 flies (16 species), all paratypes but one specimen (145490, exchange).

TOOTHAKER, C. R., Philadelphia, Pa.: 8 specimens of chiolite and associated minerals from Greenland (145741).

TORRE, Dr. CARLOS DE LA, Habana, Cuba: 64 land shells from Cuba (145792).

TOWNES, H. K., Ithaca, N. Y.: 24 crayfishes and 1 bat (144329, 145130).

TOWNSEND, L. D., Seattle, Wash.: Approximately 15 parasitic copepods (146771).

TRAIN, PERCY, Lower Rochester, Nev.: 344 plants from California (144432).

TRANSCONTINENTAL & WESTERN AIR, INC., Kansas City, Mo.: 1 model of the Northrop mail plane in which pilot Jack Fry established a transcontinental mail flight record in 1934 and a framed log description of this flight (148541).

TRAPIDO, HAROLD, Ithaca, N. Y.: 1 salamander, type, from Quebec (147989).

TRAVIS, B. V., Tallahassee, Fla.: 2 slides, representing types of 2 new Protozoa (146692); 5 slides of type material of parasites (147152).

TREADWELL, Dr. A. L., Poughkeepsie, N. Y.: 2 marine annelid worms, paratypes of 2 new species (146679).

TREASURY, U. S. DEPARTMENT OF THE: *Bureau of the Mint*: Gold medal commemorating the fourth centenary of the establishment of the Mint of Mexico in 1536 (145306); bronze-medal commemorating the appointment of Nellie Tayloe Ross as Director of the Mint, 1933 (145652); 30 United States bronze, nickel, and silver coins struck at the Denver, Philadelphia, and San Francisco Mints, in 1937 (147090). (See also under American Legion Texas Centennial Committee, United States Antietam Celebration Commission, Daniel Boone Bicentennial Commission, Pennsylvania State Commission, and F. E. Turin.)

The Coast Guard. (See under Western Operating Corporation of New York.)

Bureau of Engraving and Printing: 8 dies used in banknote engraving (146306).

Procurement Division: 2 plaster-of-Paris figures of extinct animals (142644).

Bureau of the Public Health Service: 309 insects (136402, 145921); small collection of beetles in alcohol taken from a magpie nest in Beaverhead County, Mont. (144300); 2 slides of insect material (145825); 1 insect, a paratype (146107); (through Dr. W. L. Jellison) male and female paratype specimens of flea (145215).

TRELEASE, Prof. WILLIAM, Urbana, Ill.: 1 plant from Guatemala (148548, exchange).

TUCUMAN, UNIVERSIDAD NACIONAL DE, Tucuman, Argentina: 22 plants from Argentina (147557, exchange).

TUFTS, R. W., Wolfville, Nova Scotia: 82 bird skins (144681, exchange).

TURIN, F. E., Norfolk, Va.: (Through the U. S. Department of the Treasury, Bureau of the Mint) 2 Norfolk commemorative half-dollars struck in 1937 (145312).

TWINN, Dr. C. R. (See under Canadian Government, Department of Agriculture.)

UHLER, F. M., Washington, D. C.: 1 fish (145835); 3 turtles from near Laurel, Miss. (146286). (See also under U. S. Department of Agriculture, Bureau of Biological Survey.)

ULKE, Dr. TITUS, Washington, D. C.: 20 amphipods from near Hedgeville, W. Va. (145286); 1 hornblende from near Pierce Mill on Rock Creek, D. C. (145370); 1 migrant shrike and 1 meadowlark from Virginia (147288); 1 plant (148536).

UNION SPECIAL MACHINE Co., Chicago, Ill.: Original filled-bag closing machine, invented and patented by Maj. John Bigelow, Patent No. 875314 (147113).

UNION OF SOUTH AFRICA, *Department of Agriculture*, Pretoria, Transvaal: 21 plants from Tristan da Cunha (144601, exchange); 6 plants from South Africa (148426, exchange).

UNION TRUST Co. (See under Caroline Addison.)

UNIVERSITETETS BOTANISKA MUSEUM, Copenhagen, Denmark: 193 plants from tropical America (145247, exchange).

USINGER, R. L., Oakland, Calif.: 3 insects (paratypes of 2 new species) (144537).

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: (Through Dr. G. F. Knowlton) 37 beetles (15 species), 5 slides of aphids, paratypes (132427); 29 beetles from Utah (13055); 7 aphids, comprising 4 types and 3 paratypes of 4 species, also 5 slides of 5 species of aphids (145371); 1 paratype slide of an aphid (145387); 5 flies (2 species), all paratypes (145591); 84 insects, including 13 species of Plecoptera and 6 species of aphids, 2 type slides and 1 paratype slide (146294); 3 slides of aphids, a type slide each of 2 species and a paratype slide of one (146733); 2 slides representing type material of two different species of aphids (147259); (through D. E. Hardy) 26 flies, 8 species, all type material except 2 specimens (146008); 3 beetles, representing 3 species by paratypes (146996).

VALERIO, Prof. MANUEL, San José, Costa Rica: 225 mollusks from Costa Rica and 2 salamanders (136118, 136299, 137193, 139364); 2 plants from Costa Rica (148552).

VAN CLEAVE, Dr. H. J. (See under Dr. N. T. Mattox.)

VAN DUZEE, E. P. (See under California Academy of Sciences.)

VAN VOLKENBERG, Dr. H. L., College Station, Tex.: 28 land, fresh-water, and marine shells from Puerto Rico (144487); 57 mollusks from Puerto Rico (145149, 145358).

VATIKIOTIS, Mr. and Mrs. Sozon, Tarpon Springs, Fla.: Types of 3 new species of marine shells from Florida (148004).

VAUGHAN, R. F., Honea Path, S. C.: (Through Hon. J. C. Taylor) 1 hand-made, drum-type cotton planter made prior to 1900 by Jim Nelson, Greenwood, S. C., from whom it was purchased by the donor in 1902 (145557).

VAUGHAN, Dr. T. W., Washington, D. C.: 9 syntypes and 50 topotypes of a new genus and species of Foraminifera (146110).

VASQUEZ, P. J., Aurora Hills, Va.: 1 mole (147940).

VENDITTI, A. M., Washington, D. C.: 1 Expodak exposure meter made by Eastman (146462, loan).

VICKERS (AVIATION) LTD., and ROLLS ROYCE, LTD., London, England: Model,  $\frac{1}{8}$  size, of the Vickers Vimy airplane, which, on June 14, 1919, piloted by John Alcock and navigated by Arthur W. Brown made the first nonstop flight across the North Atlantic Ocean from St. John, Newfoundland, to Clifden, Ireland (144455).

VINCENT, Mrs. A. H., Chicago, Ill.: Dr. A. H. Vincent's Eskimo notes and vocabulary, manuscripts, and clippings pertaining to the Peary Expeditions (146289).

VIOSCA, PERCY, Jr., New Orleans, La.: 3 salamanders (types of 2 new species) (138783); 2 mole crabs (146609).

VIRGINIA, UNIVERSITY OF, Charlottesville, Va.: (Through Dr. R. E. Coker) 2 beetle larvae and 2 shed skins from Giles County, Va. (144577).

VIRGINIA DEPARTMENT OF AGRICULTURE AND IMMIGRATION, *Division of Plant Industry*, Richmond, Va.: 3 bark beetles (145305).

VIRGINIA POLYTECHNIC INSTITUTE, Blacksburg, Va.: (Through Prof. A. B. Massey) 3 plants from Virginia (146802, 147032, exchanges).

VON IHERING, Dr. RUDOLPHO. (See under Comissão Técnica de Piscicultura do Nordeste do Brasil.)

VONSEN, M., Petaluma, Calif.: 10 samples of tepleite, lawsonite, and other minerals from California (146812, exchange).

VON ZASTROW, Mrs. BERTHA, New York City: Silk bag with chased-silver frame and a set of knitting needles (146715).

WADE, J. S., Washington, D. C.: Approximately 9,800 miscellaneous insects, all pinned and determined (147416).

WAGNER, W. H., Jr., Washington, D. C.: 2 ferns from Maryland and Virginia (145580, 145851); 1 sora raff (147955).

WALCOTT, Mrs. C. D., Washington, D. C.: 19 academic hoods and other mementos of the scientific career of Dr. Charles D. Walcott, secretary of the Smithsonian Institution, 1907-1927 (145790); 2 black beaver skins (146084); 1 basket and lid of baleen and carved ivory, from Point Barrow, Alaska (146759); 2 skins of Canadian black beaver and 1 skin of Canadian blue lynx (147264, loan).

WALFORD, Dr. L. A. (See under U. S. Department of Commerce, Bureau of Fisheries.)

WALKER, Ada, East Falls Church, Va.: 1 eastern screech owl (145500).

WALKER, ANNA L. (See under Berea College.)

WALKER, E. P., Washington, D. C.: 1 specimen of dogwood from the District of Columbia (148421).

WALKER, J. B., Washington, D. C.: 1 plant from the District of Columbia (148164).

WALLEY, G. S. (See under Canadian Government, Department of Agriculture.)

WANNER, Dr. J. (See under University of Bonn.)

WARD'S NATURAL SCIENCE ESTABLISHMENT, INC., Rochester, N. Y.: 1 slice of Norfolk, Va., meteorite (154 grams) (147303, exchange); 9 Devonian crinoids from New York (148127, exchange); with the Roebling Fund, 1 specimen of the Santa Maria meteorite (146466, exchange).

WASHINGTON, STATE COLLEGE OF, Pullman, Wash.: (Through Dr. C. W. Sharsmith) 55 plants from Idaho and Washington (146803, exchange).

WASHINGTON STATE DEPARTMENT OF FISHERIES, Seattle, Wash.: (Through R. T. Smith) 8 fishes from Washington State (146324).

WASSER, Mrs. LAURA J., Kings Park, N. Y.: A pictorial sampler, colored worsted cross-stitch on cotton canvas worked in 1840 at Paterson, N. J., by Mary Louisa McCully, at the age of 9, a cousin of the donor's father, Frank H. McCully, of Brooklyn, N. Y., in whose memory it was presented (147229).

WATERMAN, STEPHEN, Washington, D. C.: A guitar and case made by C. F. Martin, New York, about 1850 (145343).

WATKINS, W. G., Placerville, Calif.: 17 plants from Oregon (144364).

WEBB, J. W. (See under W. N. Beach.)

WEBER, F. S., Holyoke, Mass.: 2 molusks from Virac, Catanduanes, Philippines (145541).

WEDDERBURN, A. J., Washington, D. C.: 1 bald eagle and 1 sharp-shinned hawk (145639).

WEEKS, Mrs. DOROTHEA B. (See under Mrs. L. A. Bauer.)

WELLS, Dr. J. W. (See under Prof. H. Yabe.)

WENGER, Lt. J. N., Bethesda, Md.: 43 pictorial prints made in China, shown during January 1938 (146426, loan).

WEST, ERDMAN (See under University of Florida, Agricultural Experiment Station).

WEST, H. E., Arlington, Va.: 77 pictorial prints exhibited during November 1937 (145876, loan); 6 pictorial photographs: "Phantom," "Bridge Rock Creek," "Capitol," "Guardians of Justice," "Reflections," "Great Falls" (146301).

WESTERN OPERATING CORPORATION OF NEW YORK, New York City: (Through the U. S. Department of the Treasury, Coast Guard) Parts of the following whales: 1 southern right whale, 2 finback whales, 2 blue whales, 1 killer whale and fetuses of blue whale, finback whale, and humpback whale, 9 specimens (148006).

WESTERN UNION TELEGRAPH CO., New York City: 3 pieces of duplicate historical telegraph apparatus from the Western Union Museum (148155).

WETMORE, Dr. ALEXANDER, Washington, D. C.: 1 Korean eagle owl (145097); 3 bird skins from Virginia (145604); 1 ornamental paper knife made of solid-center bamboo (146345); 1 common swift (148571). (See also under Smithsonian Institution.)

WHERRY, Dr. E. T., Philadelphia, Pa.: 64 plants, mainly from Western United States (145325).

WHITE, Mrs. ELEANOR C., Washington, D. C.: 8 shells from Puerto Rico (147390).

WHITE, Dr. and Mrs. G. H., Jr., Upper-ville, Va.: Incomplete skeleton with skull and lower jaw (and extra pair of humeri) of a male Indian, found near Goose Creek between Middleburg and Upper-ville, Va. (146379).

WHITE, Dr. L. A., Washington, D. C.: 1 porcelain toddy jug (147289).

WHITE, MARIAN, Washington, D. C.: 1 Canton china hot-water mess plate (147287).

WHITEHEAD, JACK, Superior, Ariz.: 27 plants from Arizona (146082); 30 ferns from Arizona (146617, exchange).

WHITE HOUSE, Washington, D. C.: 16 pieces of parlor furniture made in Paris for President James Monroe in 1817 and used in the White House from that time until 1937 (145982, loan).

WHITEHOUSE, F. C., Vancouver, British Columbia: 20 dragonflies, representing 9 species (145833).

WHITLOCK, MRS. BRAND, New York City: Appointment papers of Brand Whitlock as Ambassador to Belgium, 1919, and mementos of his diplomatic service during the World War (145651).

WHITMORE, MRS. CHARLES, Hingham Center, Mass.: 50 prints by Thomas Handforth for special exhibit during February 1938 (146596, loan); 1 etching "Quillayute Dugouts," northwestern series, by Thomas Handforth (147037).

WILKINSON, D. S. (See under British Government, British Museum.)

WILLE, DR. J. E., Lima, Peru: 10 mosquitoes (148161).

WILLIAMS, F. X., Honolulu, Hawaii: 2 rats from Wake Island and 2 rats from Kusae, Caroline Islands (144194).

WILLIARD, J. E., Stillwater, Okla.: A collection of fossil plants from the Carboniferous of Oklahoma (146131).

WILSON, REV. A. P., Washington, D. C.: White-metal medal commemorating the cessation of the transportation of convicts to Tasmania in 1853 (148431).

WILSON, DR. C. B., Westfield, Mass.: 2 copepods (147405).

WINDSOR-WALKERVILLE VOCATIONAL SCHOOL, Windsor, Ontario: (Through A. D. R. Fraser) 2 specimens of *Helicostyla* from the Philippine Islands (132559).

WINTER, M. E., Washington, D. C.: 1 tintype in union case (144461).

WINTER, MRS. MAYAM E., Washington, D. C.: 3 Sandwich-glass cup plates, 1 4-mold wine glass, and 1 Chinese bronze vase (144977).

WINTHROP CHEMICAL Co., New York City: 1 line drawing of Rush Medical College, 1844, for addition to the series illustrating the history of medicine in America (144370).

WISE, A. F., Bartlesville, Okla.: 1 beetle from Oklahoma (144576).

WISE, FRANCIS, Baltimore, Md.: 8 Maryland minerals (145938, exchange); 1 specimen of zoisite and 1 of chabazite from near Baltimore, Md. (147286); 1 piece of gold from San Jose, Mexico, and 1 specimen of polybasite from Tasco, Peru (147564, exchange).

WISMER, D. C., Hatfield, Pa.: Letter signed by John Jay Knox, \$10 note of the Manual Labor Banking House, Philadelphia, 1836, and 2 sheets of 4 notes each of the Franklin Silk Co., Franklin, Ohio (145151).

WITTNER, MRS. MARGRET, Isla Floreana, Galapagos Islands: 4 insects (3 Coleoptera and 1 heteropteron) (144449).

WOLCOTT, WALTER, New York City: Totemic wood carving and carved wooden mask from the Haida Indians (145237).

WOODS, BERTHA C., Woodville, Mass.: 2 spectacles, 1 with blue steel frame and blue glass lenses, and the other with silver frame and clear glass lenses, made in the United States about 1870 and 1880, respectively, for addition to the spectacle collection (144659); 3 examples of hand embroidery, including a cardboard bookmark, a handkerchief owned by the donor's grandmother, and a reticule made by Nancy (Wood) Lewis (1778-1819), grandaunt of the donor (145023).

WOOLEMBS, WILLIS, San Antonio, Tex.: 7 millipedes from Texas (144345).

WOOTON, DR. E. O., Washington, D. C.: 1 plant from New Mexico (147258).

WORDELL, H. I., New Bedford, Mass.: 1 skeleton of a young blackfish from Cape Cod, Mass. (144542).

WORMSER, MORITZ. (See under American Numismatic Association.)

W. P. A. PLANT AND ANIMAL SURVEY, University, Miss.: 7 shrimps, 8 hermit crabs, 1 crab, and 1 fiddler crab (144074).

WRIGHT, DR. ORVILLE, Dayton, Ohio: 1 photograph from the original negative of the first airplane flight made at Kitty Hawk, N. C., December 17, 1903, with donor piloting (145767).

WRIGHT, DR. STILLMAN, Logan, Utah: A collection of copepods from South America (145501).

WUESTNER, HERMAN, Cincinnati, Ohio: 3 specimens of the mineral vivianite (146074).

WYND, DR. F. L., Columbia, Mo.: 109 plants from Coahuila (147105).

WYOMING, UNIVERSITY OF, Laramie, Wyo.: 397 plants from Arizona (145776, 147389, exchange); (through Prof. Felix Simon), 1 type slide of Mallophaga (146615).

YABE, PROF. H., Sendai, Japan: (Through Dr. J. W. Wells) The types of 2 species of corals from Japan (144463).

**YALE UNIVERSITY**, New Haven, Conn.: *Bingham Oceanographic Foundation*: (Through Prof. A. E. Parr and the U. S. Department of Commerce, Bureau of Fisheries) A collection of fishes from the middle Atlantic coast (141883); cotypes of 2 new penaeid shrimps (147190).

**Peabody Museum of Natural History**: Tarsometatarsus of a fossil bird from Ponce, Puerto Rico (135190); (through M. D. Burkenroad) 3 hermit crabs from the Northern Gulf off the Mississippi (145362).

**School of Forestry**: 1 plant from Uruguay (145504); 1 plant from Brazil (147083, exchange); 1 plant from Surinam (148422, exchange); (through Prof. S. J. Record) 3 plants from Brazil (145280).

**YINGER, NICHOLAS**, Frederick, Md.: Skeletal material recovered from the Hughes site near Poolesville, Md. (145066).

**YOUNG**, Prof. B. P., Ithaca, N. Y.: 3 mollusks from the vicinity of Ithaca (144506).

**YOUNG**, S. P. (See under U. S. Department of Agriculture, Bureau of Biological Survey.)

**ZARBELL**, Mrs. ELMER, Evanston, Ill.: Pair of white kid slippers worn by Mirilda Gilman, grandmother of the donor, in 1848 (147484).

**ZOOLOGICAL MUSEUM**, Copenhagen, Denmark: 24 bird skeletons (144981, exchange).

**ZOOLOGISKA INSTITUTIONEN**, Lund, Sweden: (Through Dr. Bertil Hanstrom) 2 lizards (paratypes) from Andros Island (105821, exchange).

**ZUBKOV**, Dr. A., Fontanka, Leningrad, U. S. S. R.: 10 skulls of Arctic fox (145439, exchange).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM  
DURING THE FISCAL YEAR 1937-38

REPORT

Report on the progress and condition of the United States National Museum  
for the year ended June 30, 1937. 8vo, iii + 130 pp. January 1938.

PROCEEDINGS

Proceedings of the United States National Museum. Vol. 84. 8vo, viii + 606  
pp., 34 figs., 80 pls.

BULLETINS

No. 166. The oxystomatous and allied crabs of America. By Mary J. Rathbun.  
vi + 278 pp., 47 figs., 86 pls. October 14, 1937.  
No. 168. Nearctic Collembola, or springtails, of the family Isotomidae. By  
J. W. Folsom. iii + 144 pp., 39 pls. July 1, 1937.  
No. 169. The Fort Union of the Crazy Mountain Field, Montana, and its Mam-  
malian fauna. By George Gaylord Simpson. x + 387 pp., 80 figs., 10 pls.  
August 21, 1937.  
No. 171. The Pleistocene vertebrate fauna from Cumberland Cave, Maryland.  
By James W. Gidley and C. Lewis Gazin. vi + 99 pp., 50 figs., 10 pls.  
May 5, 1938.

PAPERS PUBLISHED IN SEPARATE FORM

FROM BULLETIN 100

Vol. 6, part 9. The tree snails of the genus *Cochlostyla* of Mindoro Province,  
Philippine Islands. By Paul Bartsch. Pp. 373-533, pls. 94-120. February  
26, 1938.

FROM VOLUME 84 OF THE PROCEEDINGS

No. 3017. Revision of the North American species of ichneumon-flies of the  
genus *Exetastes* Gravenhorst. By R. A. Cushman. Pp. 243-312, pls. 16-21.  
July 3, 1937.  
No. 3019. Moths of the genus *Rupela* (Pyralididae: Schoenobiinae). By Carl  
Heinrich. Pp. 355-388, pls. 22-33. July 3, 1937.  
No. 3021. Observations on the birds of West Virginia. By Alexander Wetmore.  
Pp. 401-441, August 24, 1937.  
No. 3022. Annotated list of West Virginia mammals. By Remington Kellogg.  
Pp. 443-479. October 7, 1937.  
No. 3023. On the detailed skull structure of a crested hadrosaurian dinosaur.  
By Charles W. Gilmore. Pp. 481-491, figs. 29-34. October 12, 1937.  
No. 3024. Hydrocorals of the North Pacific Ocean. By Walter Kenrick Fisher.  
Pp. 493-554, pls. 34-76. March 8, 1938.  
No. 3025. A giant new species of fairy shrimp of the genus *Branchinecta* from  
the State of Washington. By James E. Lynch. Pp. 555-562, pls. 77-80.  
December 3, 1937.  
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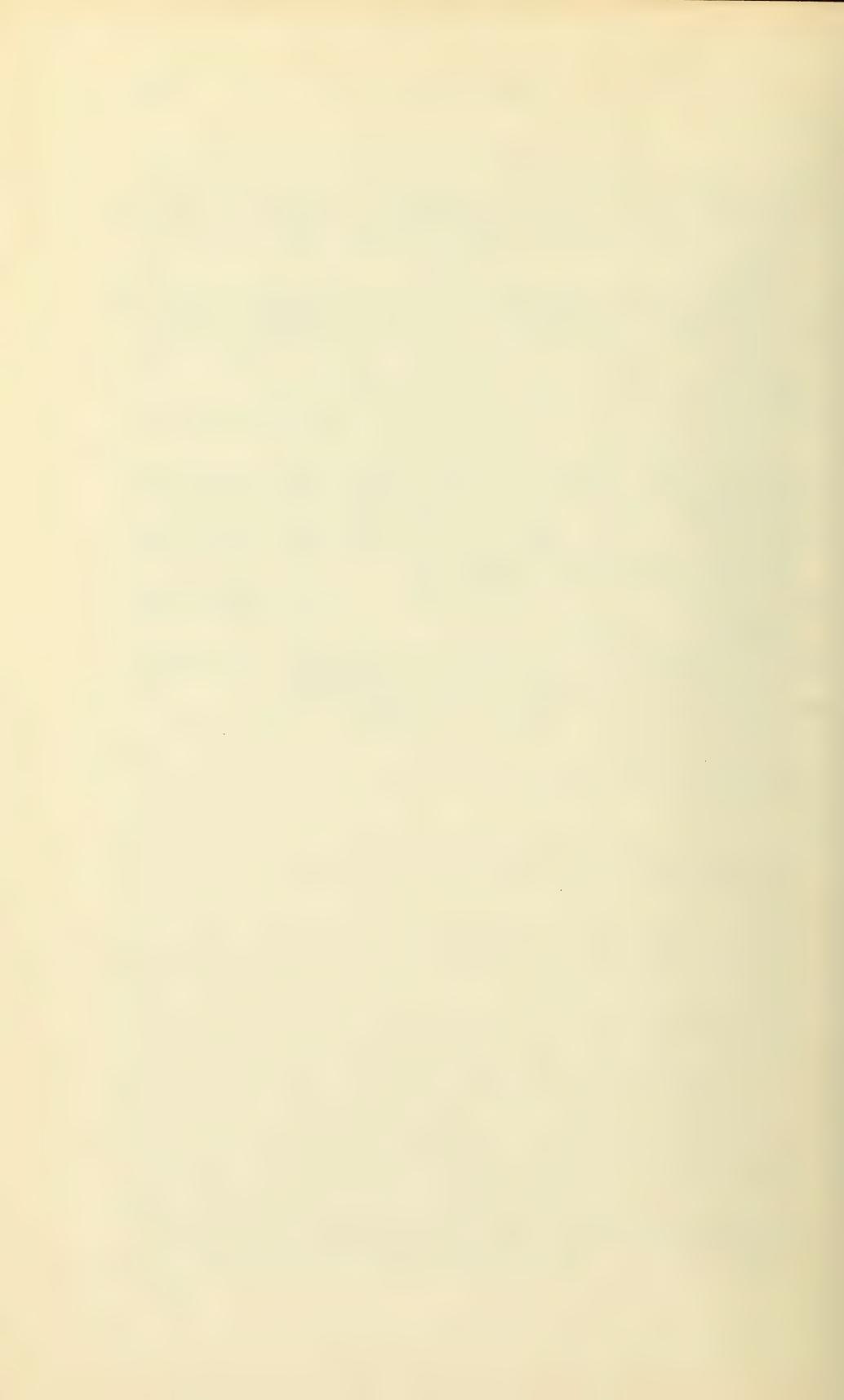
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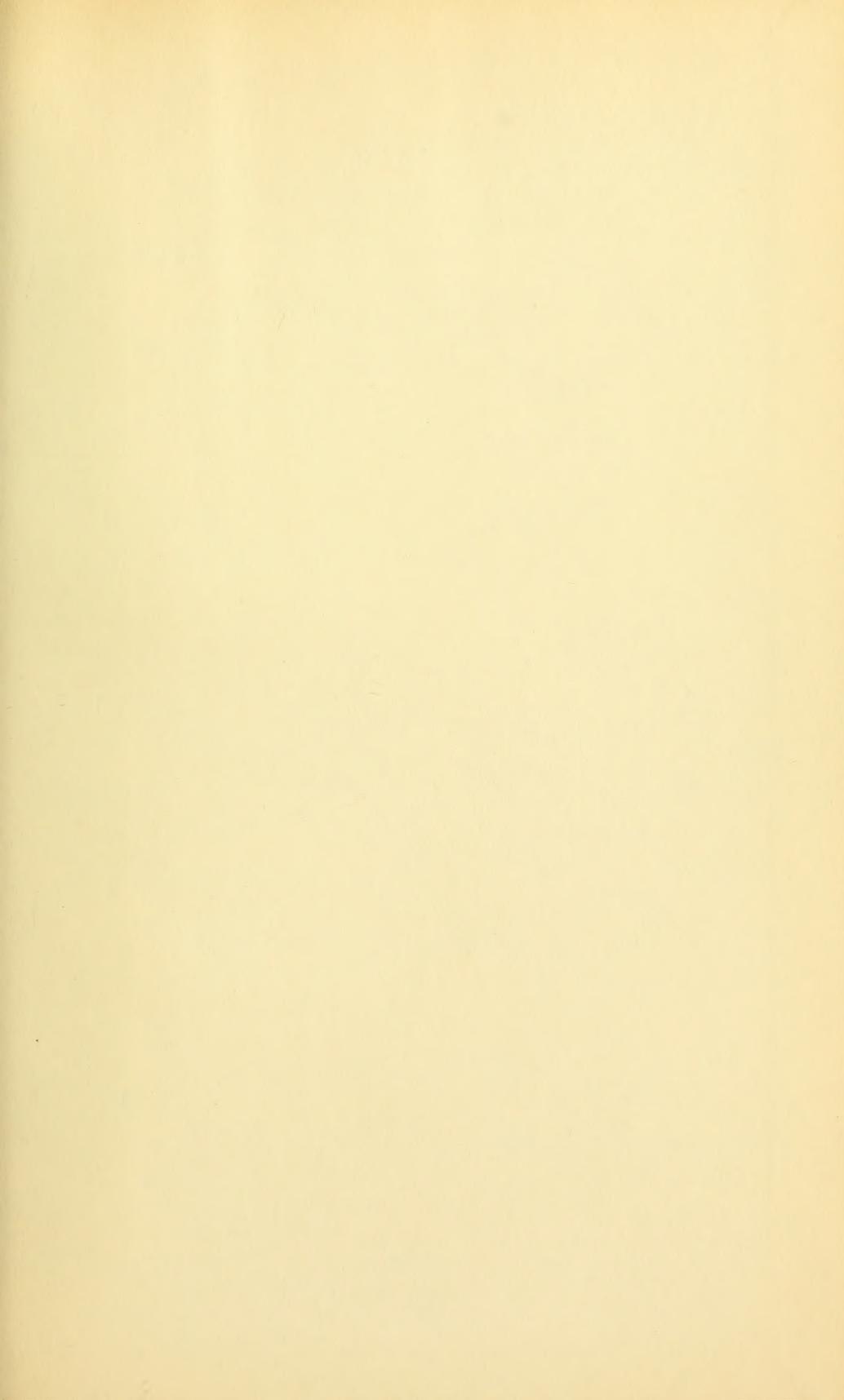
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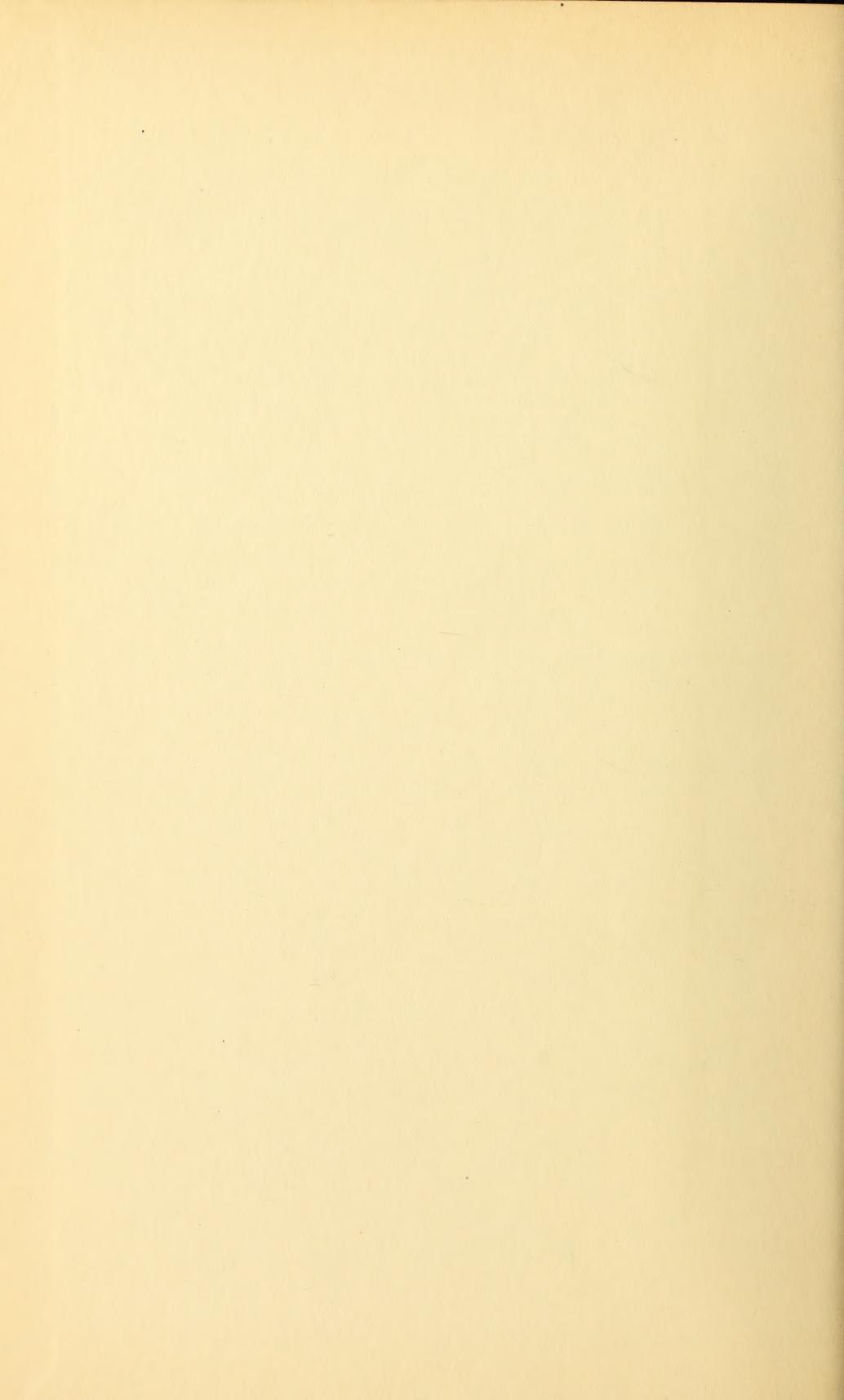
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